MILLERS FALLS
TOOLS
SINCE
1868

GOODELL
PRATT
1500 GOOD TOOLS

41

#41
$55.00

Millers Falls Company

Established 1868

E. P. Stoughton, *Chairman*

Philip Rogers, *President* — John W. Smead, *Vice President*

George U. Hatch, *Vice President* — Earl D. Holtby, *Secretary-Treasurer*

CATALOG 41

FIRST CONSOLIDATED CATALOG

OF

MILLERS FALLS TOOLS SINCE 1868

GOODELL-PRATT 1500 GOOD TOOLS

General Office

GREENFIELD, MASSACHUSETTS

United States of America

CHICAGO

Office and Warehouse
100 So. Jefferson Street, Chicago, Ill.

NEW YORK

Office and Warehouse
28 Warren Street, New York City

Factories

Greenfield, Massachusetts — Millers Falls, Massachusetts

Cable Addresses

"Millerfall" Greenfield
"Prattgood" Greenfield

Codes

Acme, A. B. C. 5th Edition, Lieber's
Western Union and Bentley's

MILLERS FALLS TOOLS
SINCE 1868

GOODELL-PRATT
1500 GOOD TOOLS

GREENFIELD, MASSACHUSETTS

Foreword

A merger of Millers Falls Company and Goodell-Pratt Company was effected on February 27, 1931. Since that time we have given careful study to the consolidation of the two lines with a view to presenting to our trade the active items which we will manufacture during the next four or five years. This new catalog represents the result of this study.

It will be noted that many items have been discontinued. It has been our aim to shorten our lines, retaining in each line sufficient tools to meet the consumer demand in respect to quality, design, and price. We believe that this set-up will meet with approval and will result in faster turnover of tool sales for the dealers. Some tools are offered under "Millers Falls" brand and other tools under "Goodell-Pratt" brand. Our judgment in this respect has been based upon the relative popularity of these individual tools during the past fifty years.

We have been improving the quality of our tools constantly. Moreover, we present in this catalog a line of popular priced tools known as "Mohawk-Shelburne," which meet the demand for lower priced tools of excellent value. We call to your attention also that announcements of several new items are made in this catalog.

We believe that our customers will appreciate that we offer today a more complete line of tools than ever before and one which is deserving of careful consideration on the part of every customer. The quality of both Millers Falls and Goodell-Pratt tools has insured a consumer acceptance over a long period of time.

We take this opportunity to express our appreciation for your loyal support in the past.

MILLERS FALLS COMPANY
Greenfield, Mass., U. S. A.

January, 1935.

Important Information

Catalog No. 41

This consolidated catalog of Millers Falls and Goodell-Pratt tools shows every active item that we manufacture and cancels all previous issues of both lines. All old catalogs should be destroyed.

Substitutions

In most instances where a Goodell-Pratt tool has been discontinued, there is a close counterpart in the Millers Falls line to take its place and vice versa. A list of the more important discontinued items, with the suggested substitutions, will be found in the back of this catalog.

Warranty

Every tool stamped with the Millers Falls or Goodell-Pratt name is warranted free from imperfections and defects in material or workmanship. Should such defects appear, we will, at our option, cheerfully repair or replace the tool without charge. Under no circumstances, however, can we assume the responsibility for breakage where flaws do not appear, nor will we replace tools which have suffered from abusive treatment or have been stamped with the owner's name, changed, or otherwise experimented upon. No dealer is authorized to make replacements for us. Articles claimed defective must be returned, charges paid, for inspection, direct to the factory at Greenfield and not to any of our branch offices.

Shipping Instructions

In ordering, please be sure to give full and explicit directions for shipment and they will be carefully followed. If no shipping instructions are given, we will use our own best judgment in forwarding shipments. All goods are at the risk of the purchaser after delivery in good order to the forwarders. We cannot hold ourselves responsible for articles lost in transit but will use our best efforts in the interest of the purchaser to locate the goods or have proper restitution made.

Service from Warehouses

Warehouse stocks are maintained in New York and Chicago for the convenience of our customers. Shipments from these stocks are subject to a very reasonable service charge.

Parts and Repairs

Repair parts can be furnished for any tool shown in this catalog. Customers should state clearly just what new parts are wanted. Owing to the considerable expense of round trip transportation, in addition to repair costs, it is recommended that the owner make his own repairs whenever it is possible.

Estimates on repairs and prices of repair parts will be gladly furnished on request.

Returned Goods

The return of goods for credit cannot be accepted without permission from the main office. Shipping instructions should be obtained for any goods to be returned for any other reason than for repair.

Terms

Invoices are payable at the main office in Greenfield, in New York or Boston funds, net 30 days from date rendered or 2 per cent discount for payment in ten days.

Shipments are F. O. B. cars Greenfield or Millers Falls, Massachusetts. Freight allowed on one hundred pound shipments of Hack Saw Blades, Electric Tools or Auger Bits. These terms subject to regulations that may be imposed in the Codes of the National Recovery Act under which we operate.

Electrotypes

The free use of our electrotypes for advertising purposes is extended to all of our customers. Electrotypes of our tools will be supplied in two sizes: the size used in our large catalog and a small size for use in a 2¼-inch column. We cannot attempt to make up any other special sizes.

Invitation

A most cordial invitation is extended to Jobbers, Distributors and Dealers to visit our factories and get acquainted with the personnel back of Millers Falls tools.

NEW TOOL SUPPLEMENT

The fifteen pages immediately following illustrate and describe new additions to the Millers Falls and Goodell-Pratt lines since the first edition of the No. 41 catalog They represent entirely new tools or improved designs with new features of decided merit and finer performance. In a few instances these new additions so completely eclipse older items that it has seemed wise to discontinue the latter. In such cases appropriate notations have been made.

We are confident that the trade is heartily in accord with our policy of continually increasing the salability and appeal of our lines by adding new items and improving others and is entirely willing to make the slight adjustments such a course may occasionally require.

To the craftsman it brings the assurance that he can rely on Millers Falls for the latest and best in quality tools; that the Millers Falls and Goodell-Pratt name on tools will always be a sure guarantee of modern design, excellent materials, skilled workmanship, beautiful finish, and superior performance. In other words tools you will be proud to own.

Workshop Accessories

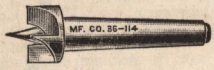
For Use with Power-Driven Workshop Machines

Nos. 96-105

CUP CENTERS WITH M. T. SHANK

Sharp hardened points with deep machined cups. Accurately ground shanks. Diameter of cups, ½ inch and ⅝ inch.

No. 105 with No. 1 M. T. Shank.....$0.70
No. 96 with No. 2 M. T. Shank..... .75



Nos. 86-114

SPUR CENTERS WITH M. T. SHANK

Sharp points and keen machined hardened spurs that assure a positive drive. Accurately ground taper shanks. Diameters of heads, ⅞ inch and 1 inch.

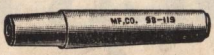
No. 114 with No. 1 M. T. Shank.....$0.70
No. 86 with No. 2 M. T. Shank..... .75

Nos. 84-117

POINT CENTERS WITH M. T. SHANK

Made from a good quality of tool steel. Points (60°) and taper shanks accurately ground and well finished.

No. 117 with No. 1 M. T. Shank.....$0.70
No. 84 with No. 2 M. T. Shank..... .75



Nos. 98-119

TAPER ARBORS WITH M. T. SHANK

Arbors hardened, accurately ground to fit the special sockets of ½ inch Jacobs No. 33 keyed chucks, No. 121 collet chuck and No. 151 shaper adapter. Taper shanks hardened and accurately ground.

No. 119 with No. 1 M. T. Shank.....$0.70
No. 98 with No. 2 M. T. Shank..... .75

Nos. 102-164

WHEEL ARBORS WITH M. T. SHANK

Diameter of arbors between flanges, ½ inch. Maximum distance between flanges, 1 inch. Fitted with accurately ground M. T. Shanks.

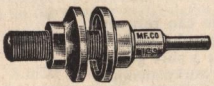
No. 164 with No. 1 M. T. Shank.....$1.00
No. 102 with No. 2 M. T. Shank..... 1.10

Nos. 103-111

CHUCKS WITH M. T. SHANK

Smooth acting chucks with three hardened jaws for holding 0 to ½-inch round shanks. Fitted with accurately ground M. T. Shanks.

No. 111 with No. 1 M. T. Shank.....$2.00
No. 103 with No. 2 M. T. Shank..... 2.00



No. 129

WHEEL ARBORS WITH ROUND SHANK

Fitted with plain round shanks for use in three-jawed chucks of electric drills, etc. Accommodate wheels up to 1 inch wide with ½-inch hole.

No. 129 with ¼-inch Shank.....$0.60
No. 322 with ½-inch Shank..... .70

Workshop Accessories

For Use with Power-Driven Workshop Machines

SHAPER CUTTER ARBOR

For driving small shaper cutters with 5/16-inch holes. Straight shank 5/16-inch diameter fits three-jawed chucks and Nos. 156 and 121 chucks.

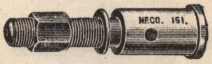
No. 158 ..... $0.45

No. 158

DRILL PRESS SHAPING ADAPTER

For use on drill press spindles having No. 33 Jacobs chuck taper and arbors Nos. 98 and 119 to permit use of shaper cutters with 1/2-inch hole. Drift key provided.

No. 151 ..... $1.10



No. 151

HEX. CUTTER NUT

Hex. cutter nut fitting 1/2 inch-24 thread and shaper arbor No. 151.

No. 159 ..... $0.10

No. 159

COLLET CHUCK

Chuck fitted with 5/16-inch collet and 11/64-inch bushing. Shank fits No. 33 Jacobs taper arbor and Nos. 98 and 119 arbors.

No. 121 ..... $1.10

No. 121

MORSE TAPER SLEEVE

An adapter for using No. 1 M. T. Shanks in a No. 2 M. T. Socket. Accurately ground socket and shank.

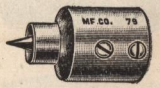
No. 152 ..... $0.75

No. 152

CUP CENTERS

Sharp hardened point and deep cup. Socket fits round tail-stock spindles. Diameter of cup, 5/8 inch. Two set screws.

No. 79 1/2 Fitting 1/2-inch Spindle $1.00
No. 79 5/8 Fitting 5/8-inch Spindle 1.00

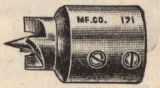


No. 79

SPUR CENTERS

Sharp, hardened point and keen, deep spurs. Socket fits round live spindles. Diameter of head, 3/4 inch. Two set screws.

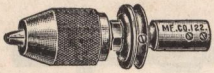
No. 171 1/2 Fitting 1/2-inch Spindle $1.00
No. 171 5/8 Fitting 5/8-inch Spindle 1.00



No. 171

Workshop Accessories

For Use with Power-Driven Workshop Machines

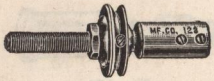


No. 122

WORK ARBORS WITH CHUCK

A combination of ½-inch capacity three-jawed chuck, a set of collars for holding wheels with ½-inch holes and a two-step pulley for driving round belts. Shank fits round spindles.

No. 122½ Fitting ½-inch Spindle.....$1.10
No. 122⅝ Fitting ⅝-inch Spindle..... 1.10

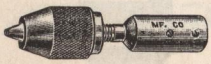


No. 123

WORK ARBORS

Fitted with set of collars for grinding or buffing wheels up to ½ inch with ½-inch holes and a two-step pulley for round belts. Shanks fit straight round spindles.

No. 123½ Fitting ½-inch Spindle.....$0.60
No. 123⅝ Fitting ⅝-inch Spindle..... .60

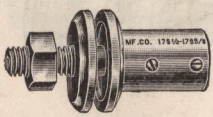


No. 863

DRILL CHUCKS

Smooth running, three-jawed keyless chucks with arbors to fit on round shafts of small motors, etc.

	Shaft	Cap.	Price
No. 837	¼ inch	5/16 inch	$1.50
No. 757	⅜ inch	¼ inch	1.50
No. 761	½ inch	⅜ inch	1.70
No. 863	½ inch	½ inch	1.80
No. 861	⅝ inch	½ inch	1.90

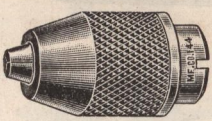


Nos. 858-868

ARBORS

Large steel flanges. Hardened tightening nut. Sockets fit straight round shafts. Two headless set screws.

	Shaft	Wheel Width	Wheel Hole	Price
No. 838	¼ inch	⅜ inch	⅜ inch	$1.00
No. 758	⅜ inch	½ inch	⅜ inch	1.00
No. 858	½ inch	¾ inch	½ inch	1.10
No. 868	⅝ inch	¾ inch	½ inch	1.20

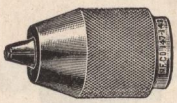


No. 144

¼-INCH KEYLESS CHUCK

Fitted with three hardened jaws for holding 0 to ¼-inch round shanks. Shank fits ½ inch-24 thread spindles.

No. 144..... $0.40



Nos. 147-148

½-INCH KEYLESS CHUCKS

Three hardened steel jaws for holding 0 to ½-inch round shanks. Fit ½ inch-24 thread arbors as on Nos. 123½, 123⅝, 102, and 104.

No. 148 Ground Finish.....$0.90
No. 147 Polished Finish..... 1.00

Workshop Accessories

For Use with Power-Driven Workshop Machines

No. 163

½-INCH CHUCK WITH ROUND SHANK

Three hardened jaws that hold 0 to ½-inch round shanks. ½-inch straight, accurately ground round shank.

No. 163 ..... **$1.25**

No. 51

No. 51 SHAFT COUPLING

A rigid coupling for ½-inch line shafting. Headless set screws.

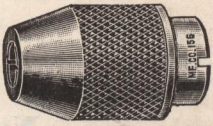
No. 51 ..... **$0.25**

No. 157

SHAPER GUIDE COLLARS

Six collars fitting ½-inch spindle to control depth of cut. Outside diameters, 19/32 inch, ¾ inch, 1 inch, 1¼ inch, 1½ inch and 1¾ inch. Width, 7/16 inch.

No. 157, per set **$1.40**

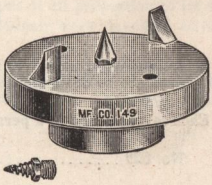


No. 156

No. 156 COLLET CHUCK

Equipped with 5/16-inch collet. Shank fits ½ inch-24 thread spindle.

No. 156 ..... **$0.75**



No. 149

No. 149 FACE PLATE

Three-inch face plate fitting ¾ inch x 16 threaded spindle. Hardened interchangeable screw and point centers and pair of hardened spurs that can be located at two different distances from the center for driving large wood blocks.

No. 149 ..... **$1.50**

Woodworking Band Saws

In bringing out this new line of wood cutting band saws, our objective has been to offer a sharper, cleaner cutting and much longer lived saw than the ordinary. A test will convince you that we have succeeded by a wide margin.

A finer grade of steel is used, the teeth are formed, set and filed by entirely new and greatly improved machinery. Special care is exercised in brazing the joints and making them much longer lived. Made in the exact length for most every workshop band saw and all widths in most lengths. Made of 26 gauge steel. Specify number, length and width.

	Length	Widths, Inches	Make of Machine	Price Each
No. 1041	4 feet 1½ inches	⅛-3/16-¼	Power King 8 inch—Shaw 8 inch	$1.00
No. 1046	4 feet 6 inches	⅛-3/16-¼	Superior 8 inch—Wallace No. 34	1.00
No. 1048	4 feet 8 inches	⅛-3/16-¼-⅜	Wood Wizard 9 inch	1.00
No. 1051	5 feet 1½ inches	⅛-3/16-¼-⅜	Driver 10 inch	1.00
No. 1056	5 feet 6 inches	⅛-3/16-¼-⅜-½	Delta 10 inch	1.00
No. 1065	6 feet 5½ inches	⅛-3/16-¼-5/16-⅜-½	Driver 12 inch—Delta 12 inch—H & A No. 11—B C 12 inch—Hutchinson 12 inch—Superior 12 inch—Ephrata 12 inch—Champion 12 inch—Duro 12 inch—Power King 12 inch	1.00
No. 1067	6 feet 7 inches	3/16-¼-5/16-⅜-½	Wood Wizard 12 inch	1.00
No. 1072	7 feet 2 inches	3/16-¼-5/16-⅜-½	H & A 14 inch—Utility 12 inch—Woodworking 14 inch	1.05
No. 1076	7 feet 6 inches	3/16-¼-5/16-⅜-½	B C 14 inch—Parks 14 inch—H & A No. 50—Wallace No. 40—S & B 12 inch	1.10
No. 1079	7 feet 9½ inches	3/16-¼-5/16-⅜-½	Delta 14 inch	1.10
No. 1085	8 feet 5 inches	3/16-¼-5/16-⅜-½	H & A No. 14—S & B 16 inch	1.20
No. 1096	9 feet 6¾ inches	⅛-¼	Driver 16 inch	1.30
No. 1096	9 feet 6¾ inches	½-¾	Driver 16 inch (24 Gauge)	1.50

No. 629 Line Level

A featherweight model with a cat's eye vial set in a hexagonal aluminum tube. The hooks and guards are so designed that it snaps on to a level line very easily but cannot be jumped off. Weight, ½ ounce.

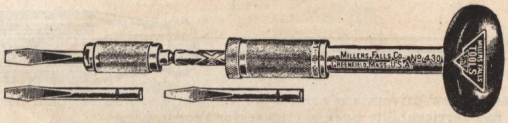
Each level packed in a permanent container of transparent celluloid with a screw cap.

	Price Each
No. 629	$0.50

Packed six in a box.

For other levels, see pages 18 to 25.

Spiral Automatic Screw Driver



Chromium Plated

This new tool is designed for use in close quarters and combines tremendous power with perfect control.

The fastest, smoothest acting hand powered tool for driving or drawing large quantities of screws. The simple, powerful operating mechanism consists of a precisely machined double spiral running in chromium plated manganese bronze nuts working in conjunction with the ratchet pawls and springs of the control mechanism. They automatically drive or draw—act as a right or left ratchet or positive driver. These actions are controlled by turning the knurled control sleeve. Knurled collar controls the new improved positive spiral locking device. Three sizes of tool steel bits supplied with each tool. All exposed metal parts polished and beautifully chromium plated. The selected hardwood handles have a fine mahogany lacquer finish.

	Length Extended	Length Closed	Weight	Price
No. 430	13⅜ inches	8⅞ inches	14 ozs.	$3.20

Packed one in a box.

No. 69 Stubby Screw Driver

A new tool so small that it can be carried unnoticed in the side pocket and still fits the palm of the hand so snugly and with such a positive grip that screws out of all proportion to its size are driven or drawn with ease. An invaluable tool for general repair work, machine adjustments, appliance repairs, and all work in close quarters.

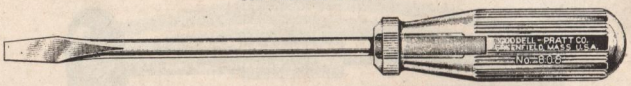
The finely polished tool steel blade, 1½ inches long, is set in a fluted hardwood handle finished in natural lacquer and protected with a heavy steel ferrule. Overall length, 4⅜ inches.

	Price Each
No. 69	$0.20

For other Screw Drivers, see pages 62 to 70.

Permaloid Handle Screw Drivers

Chromium Plated



These handsome new drivers are even more efficient and durable than they are beautiful. In no particular has serviceability been sacrificed for appearance.

They are the happy combination of a highly polished, chromium-plated special alloy steel blade and an unbreakable, transparent red Permaloid handle.

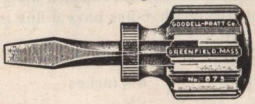
The blades are heat-treated for extreme toughness and the handles shaped and serrated to give a sure, comfortable grip. Permaloid is of high dielectric strength and provides ample protection against ordinary voltages. Permaloid is impervious to oil and water.

Available in two lengths of blade, 4 and 6 inches.

	Length Blade	Diameter Shank	Price Each
No. 808	4 inches	9/32 inch	$0.75
No. 808	6 inches	5/16 inch	1.00

Packed six in a box.

Permaloid Stubby Screw Driver



A stubby driver with unbreakable red Permaloid handle with flutes that give a positive but comfortable grip. The square blade made of fine tool steel is forged on the diagonal. Blade length, 1¾ inches. Weight, 2½ ounces.

	Price per Dozen
No. 875	$6.00

Packed six in a box.

No. 199 Offset Screw Driver

The most versatile offset screw driver ever produced. Given one-eighth turn or more to operate in, it is the master of most any screw no matter how seemingly inaccessible.

It is equipped with four blades, two at either end set at right angles to each other and the pair at one end set at 45 degrees from the pair at the other, providing a blade position for eight positions of the screws lot.

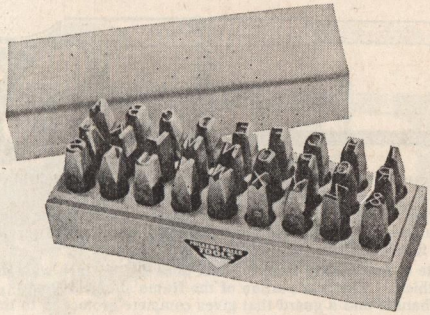
Made from a solid bar of steel with inserted blades of specially tough alloy steel carefully machined and precisely heat-treated. Its 5⅛-inch length provides powerful leverage. Each driver mounted on a two-color card.

	Price Each
No. 199	$0.35

Packed six in a box.

For other Screw Drivers, see pages 62 to 70.

Steel Letters and Figures



HAND CUT. The finest quality of stamp procurable. Every character guaranteed hand cut from the finest grade of tool steel.

The faces are accurately formed, sharply cut and deeply relieved, insuring clear, legible impressions. Faces and well formed heads are hardened and tempered with the utmost care to make these stamps the best and most economical for general industrial use.

MACHINE MADE. The characters in these sets are formed on blanks of a good quality of tool steel by a specially developed machine process using superior master dies producing sharper, cleaner faces than usual. Ample relief is provided to produce clear, long-lived impressions.

Carefully hardened and tempered faces. A fine, durable stamp for general all round use.

HAND CUT GOTHIC FACE

Height Character	No. 1300 Letters per Set	No. 1350 Figures per Set	Single Characters	Size Stock
1/32"	$15.00	$5.00	$0.60	1/4 x 2 5/8"
1/24"	13.50	4.50	.50	1/4 x 2 5/8"
1/20"	13.50	4.50	.50	1/4 x 2 5/8"
1/16"	10.50	3.50	.40	1/4 x 2 5/8"
3/32"	10.50	3.50	.40	5/16 x 2 3/4"
1/8"	10.50	3.50	.40	5/16 x 2 3/4"
5/32"	12.00	4.00	.50	3/8 x 2 7/8"
3/16"	13.50	4.50	.55	3/8 x 2 7/8"
7/32"	15.00	5.00	.65	7/16 x 3"
1/4"	16.50	5.50	.70	7/16 x 3"
5/16"	19.50	6.50	.80	1/2 x 3"
3/8"	24.00	8.00	.90	9/16 x 3 1/4"
7/16"	27.00	9.00	1.10	5/8 x 3 1/4"
1/2"	33.00	11.00	1.30	5/8 x 3 1/4"

MACHINE MADE ROMAN FACE

Height Character	No. 1500 Letters per Set	No. 1550 Figures per Set	Single Characters	Size Stock
1/32"	$7.50	$2.50	$0.35	7/32 x 2 3/8"
1/24"	7.50	2.50	.30	7/32 x 2 3/8"
1/20"	6.00	2.00	.30	7/32 x 2 3/8"
1/16"	4.50	1.50	.25	7/32 x 2 3/8"
1/12"	4.50	1.50	.25	7/32 x 2 3/8"
3/32"	4.50	1.50	.25	7/32 x 2 3/8"
1/10"	4.50	1.50	.25	1/4 x 2 1/2"
1/8"	4.50	1.50	.25	1/4 x 2 1/2"
5/32"	5.25	1.75	.30	5/16 x 2 1/2"
3/16"	6.00	2.00	.30	5/16 x 2 1/2"
7/32"	6.75	2.25	.35	3/8 x 2 5/8"
1/4"	7.50	2.50	.35	3/8 x 2 5/8"
5/16"	9.00	3.00	.40	7/16 x 2 3/4"
3/8"	10.50	3.50	.50	1/2 x 2 3/4"
7/16"	12.75	4.25	.55	9/16 x 2 7/8"
1/2"	14.25	4.75	.65	5/8 x 3"

Sets of letters, sizes 1/32" through 1/4", consist of 28 characters, including & and a period.
Sets of letters, sizes 5/16" through 1/2", consist of 27 characters, the period being omitted.
Sets of figures consist of nine characters from 0 to 8, the 6 being also used for the 9.
Each set packed in a well made, nicely finished wood box.

Hand Cut Letters and Figures packed one set in wood box with a red lacquered top and aluminum lacquered bottom.

Machine Made Letters and Figures packed one set in a stained wood box.

GREENFIELD, MASSACHUSETTS

No. 84 Hack Saw Frame

The Finest Frame Ever Made. Fitted with a "Blu-Mol" Molybdenum Blade

The new No. 84 has been brought out to head the Millers Falls line and satisfy the demand for a super quality frame—a frame that will give several generations of service—has fine balance and an exceptionally fine lasting finish.

The frame is made of fine quality steel 3/16 inch thick by 13/16 inch wide and the back of hard, tough steel 1/16 inch thick. The rear portion of the frame stamped from 3/16-inch steel affords a rigid support for the handle and a guard that gives complete protection to the hand.

The mottled red and black handle is indestructible, being molded of Tenite, a plastic that is both unbreakable and non-inflammable, and gives a comfortable grip.

Easily adjustable for 8-inch to 12-inch blades which are held by sturdy round studs with heavy pins set in clips that permit facing the blade in four directions. Any desired tension on the blade can be secured by turning up the large wing nut at the rear.

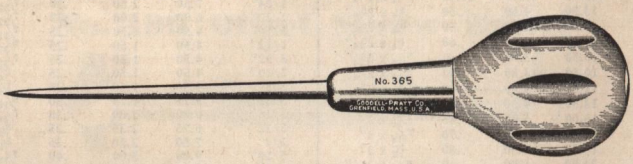
Each frame equipped with a Millers Falls "Blu-Mol" Molybdenum Hack Saw Blade, the sensational new blade guaranteed to give the lowest-cost-per-cut of any blade manufactured.

Beautifully polished, heavily nickel plated and buffed throughout.

	Capacity	Depth	Stock	Weight	Price Each
No. 84	8-12 inches	3 1/4 inches	3/16 x 13/16 inch	1 lb., 15 ozs.	$3.50

Packed one in a box.

No. 365 Diamond Point Awl



This new awl is an unusually fine value. The blade is hammer-forged tool steel, carefully hardened, tempered and polished. It runs clear through the handle, and is locked into a steel head set flush with the end of the handle. The handle, protected by a heavy steel ferrule, is selected hardwood with a natural lacquer finish and is fluted to give a good grip. These flutes also prevent the tool from rolling.

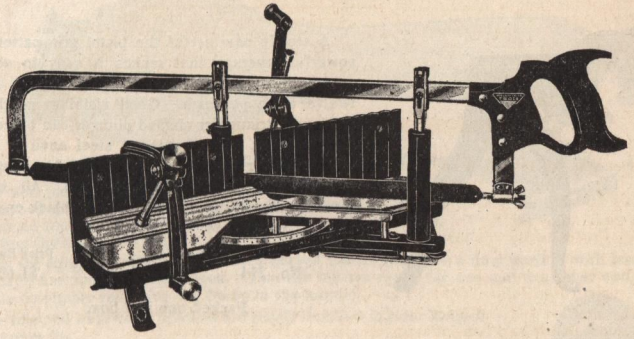
Length of blade, 3 1/2 inches. Length overall, 6 3/4 inches.

Weight each, 3 ozs.

	Price Each
No. 365	$0.40

Packed six in a box.

No. 2432 Metal Cutting Mitre Box



The tremendous activity in the modernization of store fronts and the extensive use of aluminum and alloy steel mouldings, awning covers and decorative metal strips and shapes in connection therewith has created an insistent demand for an accurate metal cutting mitre box that will handle efficiently the metal sawing problems involved.

With the exception of the clamp arms, which are malleable iron, this new Millers Falls box is made entirely of steel along the same tried and true lines of design and construction that have proved so satisfactory in our wood cutting boxes.

The ball bearing saw carriage swings freely, right or left, from 45 to 90 degrees. It locks automatically at the most used angles and can be locked at any intermediate angle by pulling the small knob at the side of the carriage. Angles are easily determined by using the graduated quadrant provided. The saw guides are extra long, as are the posts in which they run. The tops are removable so the saw frame can be inserted or removed easily. Automatic detents are provided to hold the saw in elevated position while work is being changed.

The saw frame is made of round edge steel 1 inch wide and ¼ inch thick to give ample rigidity and stand the necessary tension on the blade secured by tightening the wing nut provided.

The saw blade, which is 22 inches from center to center of holes, can be replaced without removing the frame from the box. It is 1 inch wide, .036 inch thick and has 32 teeth per inch, with a special set that produces a smooth cut. It is carefully heat-treated to give satisfactory service on alloy mouldings, iron and steel pipe, copper and brass tubing, etc.

The clamp arms are made of malleable iron and equipped with a quick adjustable steel screw that provides the pressure to hold the work in position. The pressure disc, swiveled on the end of the screw, is faced with a heavy leather pad that will not mar the finest finish. Clamps lock under front rail of bed and are adjustable lengthwise of the box. The clamps can also be tipped up over the back out of the way as illustrated at right or removed entirely by taking out two screws.

Capacity at right angles 10½ inches, at mitre 7¼ inches.

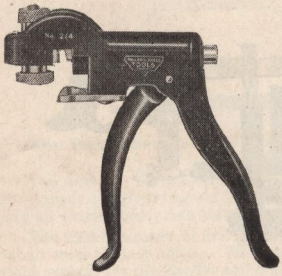
	Length Bed	Width Bed	Net Weight	Price Each
No. 2432	19½ inches	4½ inches	23 lbs.	$30.00

	Price per Dozen
Extra Blades	$6.00

Box, saw frame, clamps and one blade packed in a wooden case.

For Wood Cutting Mitre Boxes, see pages 45 to 50.

No. 214 Saw Set

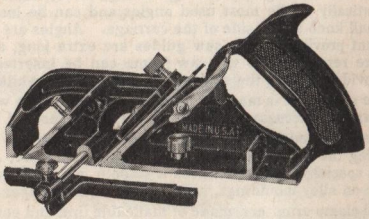


A sturdy new set of the pistol grip pattern with powerful leverage that makes it easy to obtain a positive and uniform set on any saw with four to twelve teeth per inch. Good visibility so that the hardened, triangular shaped plunger can be centered on the teeth. The hardened steel anvil is quickly adjustable for any pitch. An adjustable steel guide is provided. Lever malleable iron. All exposed steel parts cadmium plated. Frame black enameled. Weight, 1⅜ pounds.

	Price Each
No. 214	$1.60

Packed one in a box.

No. 95 Weather Strip Plane



Specially designed for rabbeting window frames for the installation of metal weatherstrip. By removing the polished steel fence on the bottom, it can be used for all types of rabbeting.

There are two seats for the cutter, one for regular work and a forward seat for bullnose work. Regular equipment includes spur and removable depth gauge, also an adjustable guide that can be used on either side of the plane or left off entirely, giving a wide range of usefulness.

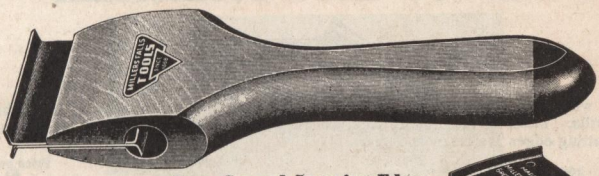
The cutter, 1½ inches wide, is made of solid, fine quality high carbon steel and is adjustable for depth when used in the rear seat.

Frame nicely black enameled. Exposed steel parts well polished or nickel plated. Weight, 3½ pounds.

	Price Each
No. 95	$4.00

Packed one in a box.

Nos. 39 and 51 Wood Scrapers



Four Curved Scraping Edges

The New Curved Four Edge Blade

The new paint brush type handle with which these scrapers are equipped greatly facilitates any scraping operation as it provides ample room to apply pressure and a sure comfortable grip in exerting the necessary pull.

They are equipped with new improved curved blades that give a finer surface with less effort. Each blade has four scraping edges. Two are always ready for use and the other two quickly available by simply reversing the blade in the handle.

The selected hardwood handles are nicely finished in clear lacquer with a green tip.

	Width of Blade	Length	Weight	Price Each
No. 39	2½ inches	8¾ inches	7 ounces	$0.50
No. 51	1½ inches	7½ inches	4 ounces	.30
No. 346	Extra Blades for No. 39			.35
No. 356	Extra Blades for No. 51			.20

Packed six in a box.

No. 53 Wood Scraper

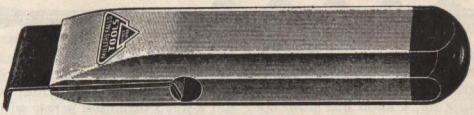
Four Curved Scraping Edges

A new type handle that permits the use of two hands on heavy work. Blade is 2½ inches wide with four curved cutting edges. Blade easily reversible. Handle clear lacquer, with green tip.

	Width of Blade	Height	Weight	Price Each
No. 53	2½ inches	5 inches	3 ounces	$0.50
No. 346	Extra Blades			.35

Packed three in a box.

No. 41 Narrow Scraper



Two Curved Scraping Edges

A narrow tool for lighter work in out-of-the-way places. Fitted with a curved blade with two scraping edges 1 inch wide. Blade reversible. The hardwood handle is finished in clear lacquer, with green tip.

	Width of Blade	Length	Weight	Price Each
No. 41	1 inch	5 inches	1 ounce	$0.20
No. 366	Extra Blades			.10

Packed six in a box.

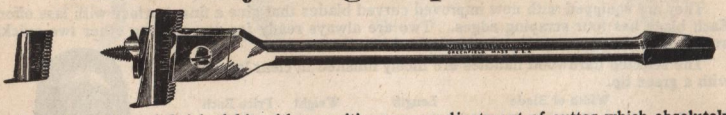
No. 399 Rose Countersink

Fitted with a ¼-inch round shank for use in the three-jawed chucks of hand, breast and electric drills. Made of fine quality steel carefully hardened and tempered for use in iron and steel. Cutting edges are clean and sharp.

	Diameter	Length	Price per Dozen
No. 399	½ inch	1¾ inches	$4.00

Packed six in a box.

Screw Adjusting Expansive Bits



A finely made and finished bit with a positive screw adjustment of cutter which absolutely prevents shifting even in the toughest woods. The cross feed screw meshes with the cutter and also the plate. One complete turn of screw increases diameter of hole ⅛ inch.

The deep, clean cut screw, sharp spurs and cutting edges make it an extremely easy boring bit. Two cutters. Beautifully finished and packed in a Fabricoid case.

	Capacity	Price Each
No. 151	⅝ inch to 1¾ inches	$1.85
No. 152	⅞ inch to 3 inches	2.20

Packed one in a box.

Extra Cutters for Nos. 151 and 152

	Capacity	Price per Dozen
No. 1	⅝ inch to 1⅛ inches	$3.00
No. 2	1⅛ inches to 1¾ inches	3.75
No. 3	⅞ inch to 1¾ inches	5.25
No. 4	1¾ inches to 3 inches	6.00

Extra Cutters for No. 152

	Capacity	Price per Dozen
No. 5	3 inches to 4 inches	$9.00
No. 6	4 inches to 5 inches	12.00

Be sure to specify number of bit cutters are to fit.

No. 520 Electricians' Bits

Designed for Speed

Specially adapted for electricians, telephone workers, linemen, plumbers and gas fitters in boring through stringers, sills, poles or floors. Solid center construction with a head fitted with a rugged cutting lip, a keen but stout spur and a deep threaded screw with a fast feed pitch. Cuts fast and clears chips freely Length of twist, 6 inches, length overall, 10 inches.

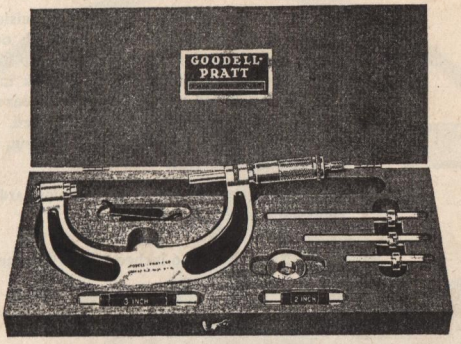
High polished finish. Machined shanks. Made in three sizes only.

	Length of Twist	Length Overall	Price per Dozen
No. 10	6 inches	10 inches	$9.00
No. 11	6 inches	10 inches	9.00
No. 12	6 inches	10 inches	9.00

Packed one-half dozen in a box.

For other Auger Bits and Countersinks, see pages 34 to 41.

No. 204R Micrometer Set



For Automotive and Aviation Service

The guaranteed accuracy of this micrometer by 1/1000ths of an inch from 0 to 4 inches gives it a wide range of usefulness. Covering, as it does, the complete range of cylinders, pistons, and crankshafts used in automotive and aviation units, it is particularly adapted to these fields.

The four anvils are easily interchangeable and their accuracy can be quickly checked by means of the three standards furnished for the purpose.

The micrometer is equipped with spindle lock, speeder and ratchet stop. Every necessary adjustment for wear provided.

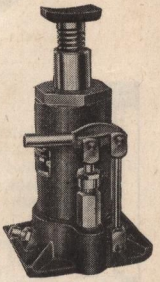
Each set, the micrometer, four anvils, three standards and two wrenches packed in the beautiful solid mahogany case illustrated above. Weight of case complete, 2¼ pounds.

No. 204R Set Complete.....$22.25

Packed one in a box.

No. 190 Hydraulic Jack

12 Ton Capacity



A powerful jack, designed for heavy duty and long and dependable service.

It is similar in design to the No. 180, but with solid steel cylinder and heavier parts to amply care for the heavy loads to be imposed upon it.

The pump is positive in its action, requiring but little effort while the release valve permits lowering of loads gently to the ground.

Equipped with hand-operated auxiliary screw.

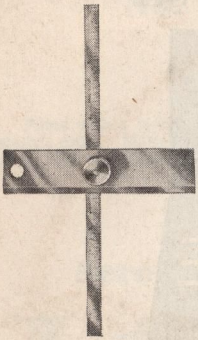
Handle is steel, extensible to 36 inches.

Nicely finished in gray and red enamel.

Dimensions of base, 5¾ x 7¾ inches.

	Capacity	Minimum Height	Maximum Height	Ram Lift	Screw Extension	Weight with Handle	Price Each
No. 190	12 tons	9¾ inches	21¾ inches	6⅛ inches	4 inches	33 lbs.	$30.00

Packed one in a box.



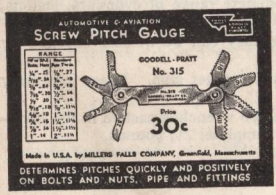
No. 280 Rule Depth Gauge

This gauge consists of a narrow precision 6-inch steel rule held in a groove by means of a thumb nut with an internal spring which provides sufficient friction to hold the rule in place while adjustments are made. For work in close quarters the rule may be shifted to groove provided near the end of the base. Rule may be entirely removed if desired. It is graduated in 32nds and 64ths. Base is 3½ inches long, nicely polished and with one edge beveled.

Each gauge mounted on a two-color card and contained in a cellophane envelope.

	Rule	Base	Price Each
No. 280	6 inches	3½ inches	$1.25

Packed three in a box.



No. 315 Screw Pitch Gauge

A popular priced gauge with eight leaves, covering all National Fine (NF) or SAE threads from ¼ inch-28 to 1 inch-14 and Standard Pipe threads from ⅛ inch-27 to 2 inches-11½. In other words, all the standard threads both NF or SAE and Pipe used in the automotive and aviation fields.

Each gauge mounted on a card printed in red and black as illustrated.

	Price Each
No. 315	$0.30

Packed six in a box.

No. 20 Vest Pocket Rule

A big value in a 6-inch narrow precision steel rule with a fine finish and genuine etched figures and graduations. Graduated in 32nds of an inch on one side and 64ths on the other. Fitted with a sliding vest pocket clip, which also serves as a depth gauge.

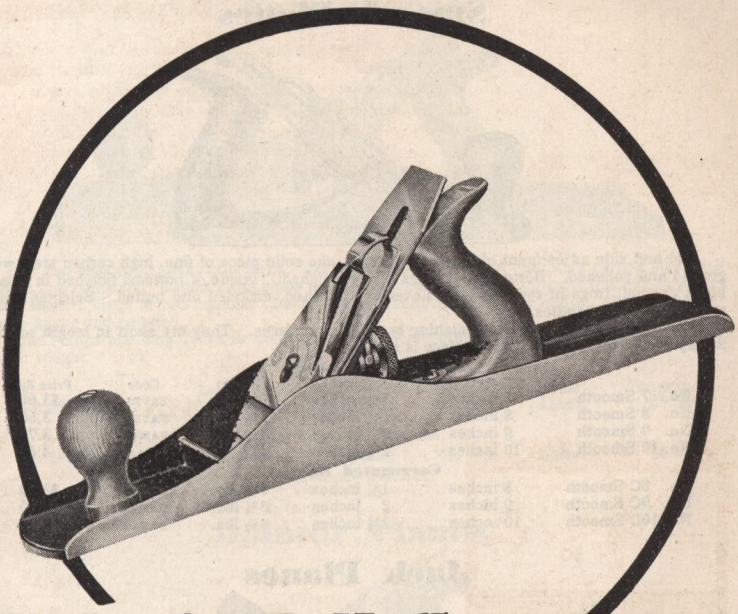
Length 6 inches, width ¼ inch, thickness 1/20 inch.

Each rule mounted on a two-color card in a cellophane envelope.

	Length	Width	Price Each
No. 20	6 inches	¼ inch	$0.35

Packed six in a box. Weight, 4 ounces.

For other Precision Tools, see pages 188 to 214.



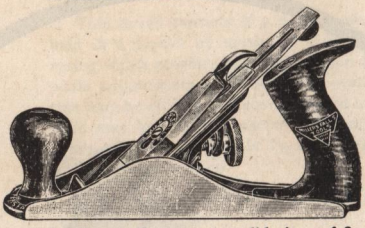
PLANES

Millers Falls planes were first announced in our last catalog. Since that time and under the most unfavorable conditions, the line has been accepted by the trade generally as the best built line available and on its merits continues to gain favor over older lines that do not embody the same improvements and fine construction.

Bottoms and frogs are made of fine gray iron castings, accurately machined and well polished. The irons are made of the best quality of steel, heat-treated to hold a razorlike edge. The adjustments are sensitive and positive.

The cutting angles, position of throat and the two-piece lever cap all contribute to the fine trouble-free performance of Millers Falls planes. The finish is in perfect keeping with the high quality maintained throughout the lines.

Smooth Planes

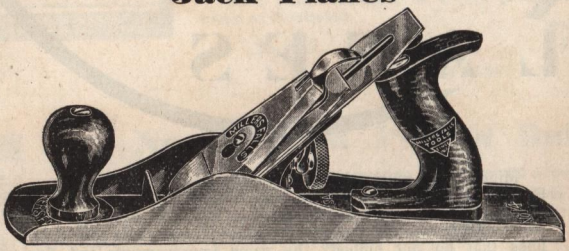


End and side adjustment of cutters. Cutters one solid piece of fine, high carbon steel well ground and polished. Bottoms and sides nicely polished. Inside of bottoms finished in glossy black enamel, frogs in red enamel. Lever cap polished, nickeled and buffed. Selected rosewood knobs and handles.

Smooth Planes are used for finishing broad, flat surfaces. They are short in length so that low spots can be reached if the surface is uneven.

	Length	Cutter	Weight	Code	Price Each
Smooth Bottom					
No. 7 Smooth	7 inches	1⅝ inches	2¼ lbs.	EAVES	$3.60
No. 8 Smooth	8 inches	1¾ inches	3⅛ lbs.	EATER	3.60
No. 9 Smooth	9 inches	2 inches	3¾ lbs.	EAMES	3.70
No. 10 Smooth	10 inches	2⅜ inches	4½ lbs.	EAMAT	4.60
Corrugated Bottom					
No. 8C Smooth	8 inches	1¾ inches	3⅛ lbs.	EAWEL	$3.80
No. 9C Smooth	9 inches	2 inches	3¾ lbs.	EAMOG	3.90
No. 10C Smooth	10 inches	2⅜ inches	4½ lbs.	EAWOR	4.90

Jack Planes

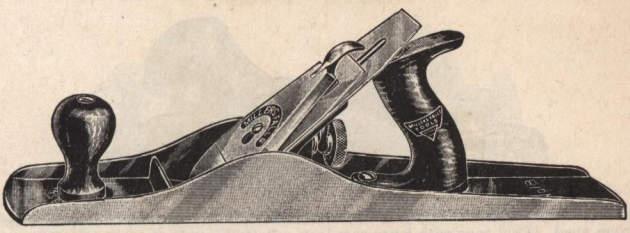


Jack Planes are used on the edges of boards for rough, heavy cuts and also the final truing up preparatory to jointing.

	Length	Cutter	Weight	Code	Price Each
Smooth Bottom					
No. 11 Jack	11½ inches	1¾ inches	3¾ lbs.	EAWIT	$3.90
No. 14 Jack	14 inches	2 inches	4¾ lbs.	EAWUG	4.20
No. 15 Jack	15 inches	2¼ inches	6¾ lbs.	EARLS	5.30
Corrugated Bottom					
No. 14C Jack	14 inches	2 inches	4¾ lbs.	EAVAD	$4.40
No. 15C Jack	15 inches	2¼ inches	6¾ lbs.	EAVOQ	5.60

Packed one in a box.

Fore Planes



End and side adjustment of cutters. Cutters one solid piece of fine, high carbon steel well ground and polished. Bottoms and sides nicely polished. Inside of bottoms finished in glossy black enamel, frogs in red enamel. Lever cap polished, nickeled and buffed. Selected rosewoods knobs and handles.

Fore Planes are long Jacks or short Jointers. Some prefer them to the Jointer for their lighter weight.

Smooth Bottom

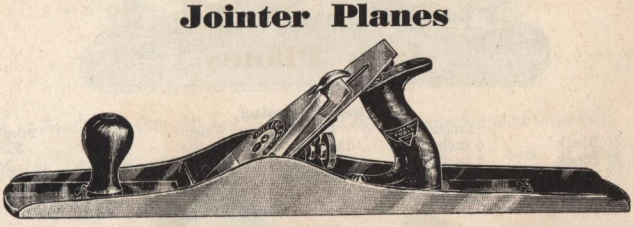
	Length	Cutter	Weight	Code	Price Each
No. 18 Fore	18 inches	2⅜ inches	6¼ lbs.	EABON	$5.80

Corrugated Bottom

No. 18C Fore	18 inches	2⅜ inches	6¼ lbs.	EACOR	$6.10

Packed one in a box.

Jointer Planes



End and side adjustment of cutters. Cutters one solid piece of fine, high carbon steel well ground and polished. Bottoms and sides nicely polished. Inside of bottoms finished in glossy black enamel, frogs in red enamel. Lever cap polished, nickeled and buffed. Selected rosewood knobs and handles.

Jointer Planes are used for finishing, more generally for dressing edges to a light tight fit that are to be glued or joined together.

Smooth Bottom

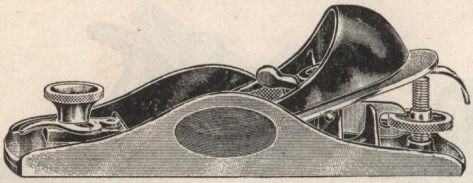
	Length	Cutter	Weight	Code	Price Each
No. 22 Jointer	22 inches	2⅜ inches	8⅛ lbs.	EADEN	$7.20
No. 24 Jointer	24 inches	2⅝ inches	9¾ lbs.	EACUL	8.40

Corrugated Bottom

No. 22C Jointer	22 inches	2⅜ inches	8⅛ lbs.	EAFER	$7.50
No. 24C Jointer	24 inches	2⅝ inches	9¾ lbs.	EAGOL	8.80

Packed one in a box.

Adjustable Block Planes

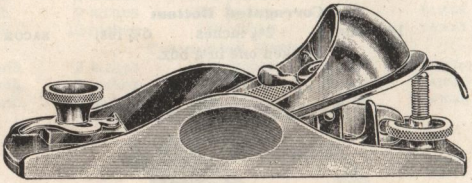


Adjustable throat with end and side adjustment of cutters. Cutters one solid piece of fine, high carbon steel. Cast caps with lever cam lock. Bottoms and sides nicely polished. Inside of bottoms finished in glossy black enamel.

The bevel of the cutter of a Block Plane is on the upper side and the iron is set at an angle of 20 degrees to the bottom. They are used for working across the grain and many other places where a light plane, easily controlled with one hand, is a convenience.

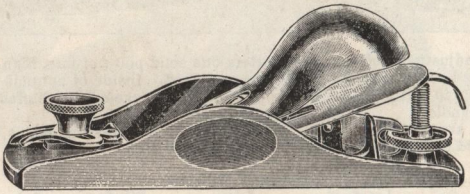
Enamel Trimming

	Length	Cutter	Weight	Code	Price Each
No. 16 Block	6 inches	1⅝ inches	1½ lbs.	EBENS	$1.90
No. 17 Block	7 inches	1⅝ inches	1⅝ lbs.	EBORG	2.10



Nickel Trimming

	Length	Cutter	Weight	Code	Price Each
No. 26 Block	6 inches	1⅝ inches	1½ lbs.	EBONY	$2.50
No. 27 Block	7 inches	1⅝ inches	1⅝ lbs.	EBROL	2.80



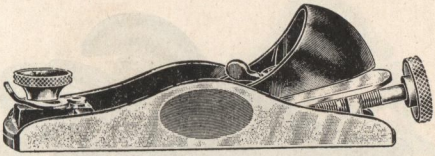
Nickel Trimming

Same as above, but with polished and nickeled cap with knuckle joint lever clamp.

	Length	Cutter	Weight	Code	Price Each
No. 36 Block	6 inches	1⅝ inches	1½ lbs.	EBRAG	$2.60
No. 37 Block	7 inches	1⅝ inches	1⅝ lbs.	EBREL	2.90

Packed one in a box.

Low Angle Block Planes



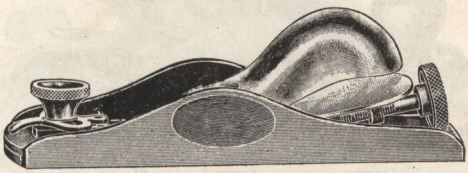
Adjustable throat. Screw end adjustment of cutter. Cutters made of one solid piece of fine, high carbon steel set at an angle of 12 degrees, with the bottom making it particularly well suited for cutting across the grain of hard woods.

Black Enamel Trimming

	Length	Cutter	Weight	Code	Price Each
No. 56 Block	6 inches	1⅜ inches	1¼ lbs.	ECROW	$2.10
No. 57 Block	7 inches	1⅝ inches	1⅜ lbs.	ECTOL	2.40

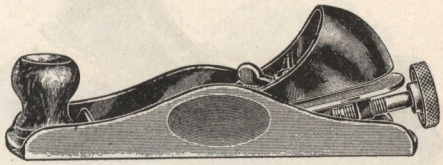
Nickel Trimming

No. 46 Block	6 inches	1⅜ inches	1¼ lbs.	ECMUG	$2.40



Same as No. 57, but with polished and nickeled cap with knuckle joint lever lock. Nickel trimming.

	Length	Cutter	Weight	Code	Price Each
No. 47 Block	7 inches	1⅝ inches	1⅜ lbs.	ECTRO	$2.90

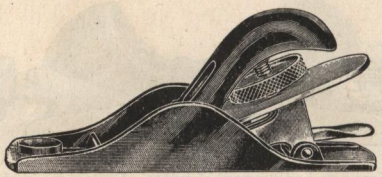


Similar to No. 46, but with non-adjustable throat and a rosewood knob handle. Nickel trimming.

	Length	Cutter	Weight	Code	Price Each
No. 66 Block	6 inches	1⅜ inches	1¼ lbs.	ECPEK	$2.10

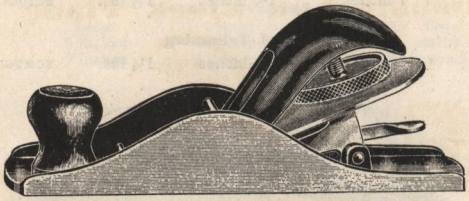
Packed one in a box.

Adjustable Block Planes



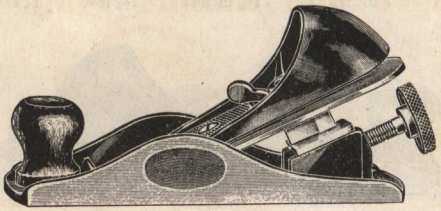
Lever end adjustment. Screw operated cap clamp. Bottoms polished. Sides black enameled.

	Length	Cutter	Weight	Code	Price Each
No. 55 Block	5½ inches	1⅜ inches	⅞ lb.	EDELS	$1.00



Longer and wider than No. 55, with polished sides and a rosewood knob handle. Lever end adjustment. Screw operated cap clamp.

	Length	Cutter	Weight	Code	Price Each
No. 97 Block	7 inches	1⅝ inches	1⅜ lbs.	EDANS	$1.50



Cast cap with lever cam lock. Screw end adjustment of cutter. Polished sides. Rosewood knob handle.

	Length	Cutter	Weight	Code	Price Each
No. 45 Block	5½ inches	1⅜ inches	1⅛ lbs.	EDROX	$1.45

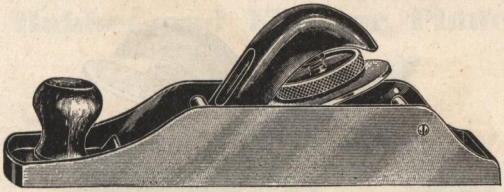
Packed one in a box.

Adjustable Block Plane

Longer and wider than No. 45. Screw end adjustment of cutter. Cast cap with lever cam lock. Polished sides. Rosewood knob handle.

	Length	Cutter	Weight	Code	Price Each
No. 75 Block	7 inches	1⅝ inches	1½ lbs.	EDRAL	$1.50

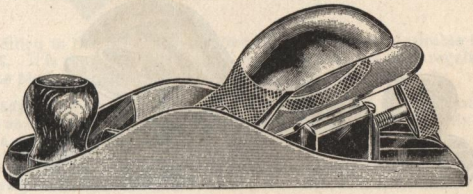
Double End Block Plane



Equipped with two throats and two cutter seats. Block Plane as illustrated and a rabbet with cutter reversed.

	Length	Cutter	Weight	Code	Price Each
No. 68 Block	8 inches	1⅝ inches	1⅝ lbs.	EDFEN	$1.70

Block and Rabbet Plane

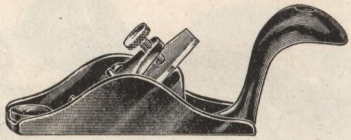


Right side can be easily removed to convert this from a Block to a Rabbet Plane. End adjustment of the skew cutter. Black enamel trimming.

	Length	Cutter	Weight	Code	Price Each
No. 07	7 inches	1¾ inches	1⅛ lbs.	ESCOW	$2.60

Packed one in a box.

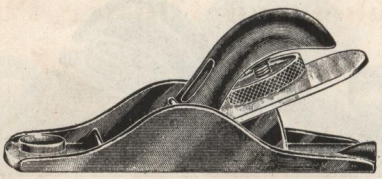
Non-Adjustable Block Planes



Inexpensive but serviceable planes. Screw operated cap clamps. Bottoms polished. Sides and cap black enameled.

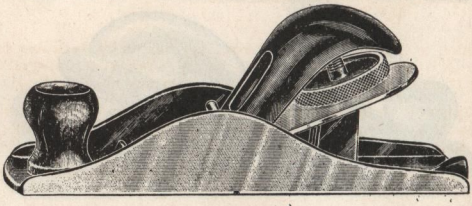
No. 33 exactly the same as No. 3, but without handle.

	Length	Cutter	Weight	Code	Price Each
No. 33 Block	3½ inches	1 inch	¼ lb.	EDOOL	$0.45
No. 3 Block	3½ inches	1 inch	⅜ lb.	EDRUY	.55



Longer and wider than above. Screw operated cap clamp. Sides and cap black enameled.

	Length	Cutter	Weight	Code	Price Each
No. 5 Block	5½ inches	1⅜ inches	⅞ lb.	EDWAD	$0.80

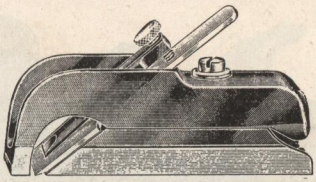


Similar to above, but longer and wider, with rosewood knob handle. Screw operated cap clamp. Polished sides.

	Length	Cutter	Weight	Code	Price Each
No. 87 Block	7 inches	1⅝ inches	1⅜ lbs.	EDOLT	$1.00

Packed one in each box.

Bull Nose Rabbet Plane

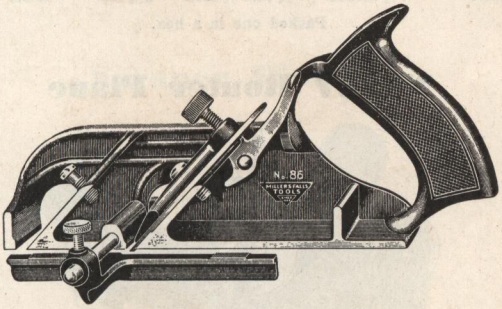


Especially adapted for working in close quarters and up into corners. Polished bottom and sides. Black enamel trim.

	Length	Width	Weight	Code	Price Each
No. 4 Rabbet	4 inches	1 inch	5/8 lb.	EFACE	$0.80

Packed one in a box.

Rabbet and Fillister Plane



This new addition to the Millers Falls Plane Line has every desirable feature in a rabbet plane built into it. It is equipped with two cutter seats—a rear seat for regular work with a lever adjustment of the blade for depth, and a forward seat for bull nose work.

The fence is adjustable on the steel arm. The steel arm and the fence can be used on either side of the plane as the work requires. When the arm and fence are entirely removed, the plane can be used for a wide variety of uses.

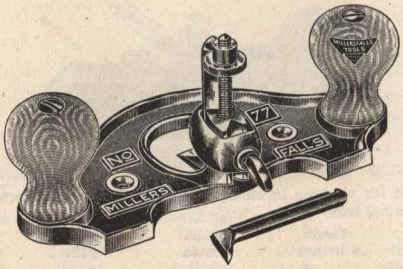
A three-point spur and a depth gauge are also part of the equipment. The depth gauge can be removed entirely when desired.

Body of plane nicely finished in black enamel. Bottom and both sides accurately ground. Trimmings and small steel parts nickel plated.

	Length	Cutter	Weight	Code	Price Each
No. 85 Rabbet	8½ inches	1½ inches	3 lbs.	EDMAN	$2.60

Packed one in a box.

No. 77 Router Plane

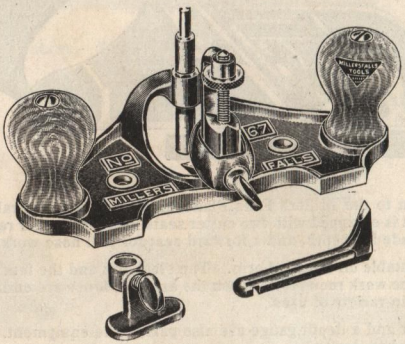


Two cutters supplied. Cutters adjustable in holder. Cutters held in front holder for regular work and back holder for bull-nose work. Closed throat. Mahogany finished handles. Nickel plated.

	Length	Cutters	Weight	Code	Price Each
No. 77 Router	7½ inches	¼ and ½ inch	2⅛ lbs.	EFRAD	$3.30

Packed one in a box.

No. 67 Router Plane

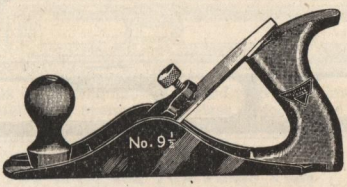


Same as above, with open throat and attachment for closing the throat when used on narrow surfaces and controlling the depth of cut.

	Length	Cutters	Weight	Code	Price Each
No. 67 Router	7½ inches	¼ and ½ inch	2⅛ lbs.	EFRUE	$4.10

Packed one in a box.

Scrub Planes

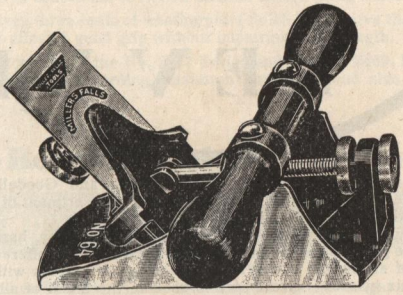


Sturdy, well-built tools with an extra heavy cutter with rounded cutting edge for preparing rough surfaces to be finished with a smooth or jointer plane. Body and cap black enameled. Knob and handle mahogany finished hardwood.

	Length	Cutter	Weight	Code	Price Each
No. 9½ Scrub	9½ inches	1⅛ inches	2⅛ lbs.	EGGER	$2.10
No. 10½ Scrub	10½ inches	1½ inches	2½ lbs.	EGRAM	2.60

Packed one in a box.

Scraper Planes

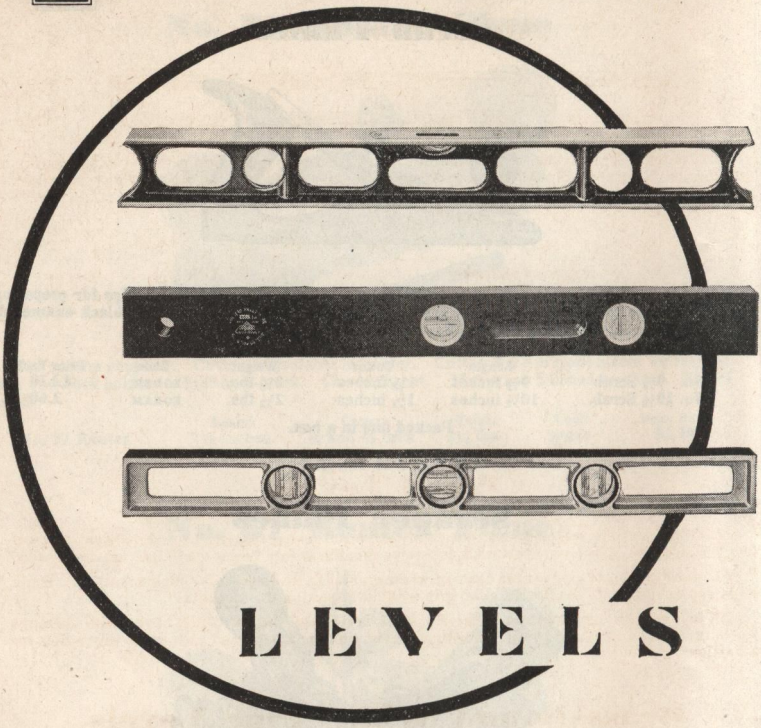


Double grip rosewood handles. Cutters adjustable endwise, and also to any angle. Can be securely locked at desired position. No. 65 same as No. 64, but with rosewood bottom.

	Length	Cutter	Weight	Code	Price Each
No. 64 Scraper	6¼ inches	2⅞ inches	3¾ lbs.	EGLAT	$4.20
No. 65 Scraper	6¼ inches	2⅞ inches	4 lbs.	EGORT	5.70

Extra rosewood bottoms $0.50 Extra scraper blades $0.50

Packed one in a box.



LEVELS

The amalgamation of the Millers Falls and Goodell-Pratt lines of levels results in an unusually complete assortment of styles and lengths of wood, aluminum and iron levels.

Carpenters' and masons' wood levels of mahogany, hardwood and white pine, specially selected and seasoned, are offered in a variety of styles and a very complete range of lengths with two, four or six glasses. Great care is used in the finish of all wood levels as it is imperative that moisture be excluded if their accuracy is to endure.

Aluminum levels made from well seasoned castings with accurately machined working faces are available in seven lengths, all with six glasses.

Iron levels, made of long seasoned fine gray iron castings, of both mill and bench types, are available in several lengths. The line also includes line and pocket levels in heavily nickeled brass tubes.

Millers Falls and Goodell-Pratt levels are guaranteed accurate when they leave the factory. This accuracy will endure just so long as they receive the careful handling necessary for this kind of tool.

Aluminum Levels

The frame of these levels is cast aluminum designed to give maximum strength and rigidity with minimum weight. Round white openings with glass protection for vials, giving clear vision and luminosity. Leveling surfaces, ends and round vial rims finished in red.

Two Level and Two Plumb Vials

	Dimensions, Inches	Weight	Code	Price Each
No. 1012	12 x 2¼ x 1⅛	1¼ lbs.	PEBAM	$2.00
No. 1018	18 x 2¼ x 1⅛	1¾ lbs.	PEBEL	2.70
No. 1024	24 x 2¼ x 1⅛	2 lbs.	PEBIT	3.30
No. 1026	26 x 2¼ x 1⅛	2¼ lbs.	PEBLO	3.50
No. 1028	28 x 2¼ x 1⅛	2½ lbs.	PEBOX	4.00
No. 1030	30 x 2¼ x 1⅛	2¾ lbs.	PEBUR	4.20

Packed one in a box.

Wood Levels

Made of carefully selected and thoroughly air-dried mahogany, birch or white pine as specified. Billets are allowed to season six to twelve months before being made into finished levels.

All wood levels are given three coats of weatherproof finish to preserve their accuracy. Hand grips are deep enough to afford a good grip without impairing the strength.

All levels, with the exception of the No. 2712 Series and the No. 2409, have white openings for both Level and Plumb Vials, affording maximum luminosity, and also glass protection for all vials.

Brass-Bound White Pine Levels

Full brass binding and end plates. Three weatherproof coats of bright red lacquer.

Two Level and Two Plumb Vials

	Dimensions, Inches	Weight	Code	Price Each
No. 224	24 x 2½ x 1¼	1½ lbs.	PECAR	$4.00
No. 226	26 x 2½ x 1¼	1½ lbs.	PECCO	4.10
No. 228	28 x 2½ x 1¼	1¾ lbs.	PECOT	4.20
No. 230	30 x 2½ x 1¼	1¾ lbs.	PECUM	4.30

Packed one in a box.

Solid Mahogany Levels

Selected straight grain mahogany with natural finish obtained by applying three weatherproof coats of clear lacquer.

Two Level and Two Plumb Vials

	Dimensions, Inches	Weight	Code	Price Each
No. 624	24 x 2½ x 1¼	1½ lbs.	PEDAN	$2.30
No. 626	26 x 2½ x 1¼	1½ lbs.	PEDIT	2.40
No. 628	28 x 2½ x 1¼	1¾ lbs.	PEDOR	2.45
No. 630	30 x 2½ x 1¼	1¾ lbs.	PEDUL	2.50

Packed one in a box.

White Pine Levels

Made from a plain piece of straight grained white pine, thoroughly seasoned and finished with three weatherproof coats of red lacquer. White glass protected openings for vials.

Two Level and Two Plumb Vials

	Dimensions, Inches	Weight	Code	Price Each
No. 124	24 x 2½ x 1¼	1½ lbs.	PEFAM	$2.00
No. 126	26 x 2½ x 1¼	1½ lbs.	PEFEL	2.05
No. 128	28 x 2½ x 1¼	1½ lbs.	PEFOR	2.10
No. 130	30 x 2½ x 1¼	1½ lbs.	PEFUX	2.15

Packed one in a box.

One Level and One Plumb Vial

	Dimensions, Inches	Weight	Code	Price Each
No. 312	12 x 2½ x 1¼	1 lb.	PEGAM	$1.00
No. 316	16 x 2½ x 1¼	1 lb.	PEGER	1.05
No. 318	18 x 2½ x 1¼	1 lb.	PEGIS	1.10
No. 320	20 x 2½ x 1¼	1 lb.	PEGLO	1.15
No. 324	24 x 2½ x 1¼	1½ lbs.	PEGMY	1.25
No. 326	26 x 2½ x 1¼	1½ lbs.	PEGOD	1.30
No. 328	28 x 2½ x 1¼	1½ lbs.	PEGUN	1.35
No. 330	30 x 2½ x 1¼	1½ lbs.	PEGYT	1.40

Packed one in a box.

Birch Levels

Made from a solid billet of selected straight grained, thoroughly seasoned birch. They re stained mahogany and given a durable hot oil finish, making them highly weatherproof. evel vial protected by a brass plate.

One Level and One Plumb Vial

	Dimensions, Inches	Weight	Code	Price Each
No. 2712	12 x 2 3/16 x 1 1/4	3/4 lb.	ZOFUG	$1.00
No. 2718	18 x 2 3/8 x 1 1/4	1 1/4 lbs.	ZOFYP	1.10
No. 2724	24 x 2 3/8 x 1 1/4	1 5/8 lbs.	ZOFZT	1.25

Packed one dozen in a wooden box.

No. 2409 Torpedo Level

A handy little level made of selected straight grained wood effectively weatherproof with a urable hot oil finish. Level vial protected by a brass plate.

One Level and One Plumb Vial

	Dimensions, Inches	Weight	Code	Price Each
No. 2409	9 7/8 x 1 1/2 x 5/8	1/4 lb.	ZOFLA	$1.10

Packed six in a box.

Aluminum Masons' Levels

Same fine materials, construction and finish as No. 1012 Series. With glass protected vials.

Two Level and Four Plumb Vials

	Dimensions, Inches	Weight	Code	Price Each
No. 1042	42 x 2 1/4 x 1 1/8	3 lbs.	PEBYK	$9.00

Packed one in a box.

Solid Mahogany Masons' Levels

Made from a solid billet of selected straight grain mahogany with brass end plates. White val holes with glass protection for vials. Natural mahogany weatherproof finish.

Two Level and Four Plumb Vials

	Dimensions, Inches	Weight	Code	Price Each
No. 648	48 x 2 1/2 x 1 1/4	3 1/2 lbs.	PEHEX	$5.05

Packed one in a box.

White Pine Masons' Levels

Full brass binding. Straight grain, thoroughly seasoned white pine. Round white, glass protected openings. Red weatherproof finish.

Two Level and Four Plumb Vials

	Dimensions, Inches	Weight	Code	Price Each
No. 748	48 x 2½ x 1¼	3½ lbs.	PEIHL	$5.75

Same as above, but with oval openings. Full brass bound.

Two Level and Four Plumb Vials

	Dimensions, Inches	Weight	Code	Price Each
No. 948	48 x 2½ x 1¼	3½ lbs.	PEJJO	$5.75

Brass ends, but without binding. Oval openings.

Two Level and Four Plumb Vials

	Dimensions, Inches	Weight	Code	Price Each
No. 848	48 x 2½ x 1¼	2½ lbs.	PEKAC	$4.25

Same as above, but without brass ends. Round openings.

Two Level and Four Plumb Vials

	Dimensions, Inches	Weight	Code	Price Each
No. 548	48 x 2½ x 1¼	2½ lbs.	PELEM	$3.75

Plain. Round, glass protected openings. Red weatherproof finish.

One Level and Four Plumb Vials

	Dimensions, Inches	Weight	Code	Price Each
No. 448	48 x 2½ x 1¼	2½ lbs.	PEMAK	$2.75

Packed one in a box.

No. 154 Pocket Level

A new pocket level, suitable for hundreds of uses around the home, with the body made of a pleasingly grained hexagonal fiberloid. Fitted with a cat's-eye vial. Nickeled brass ends. Each level mounted on an attractive two-color display card.

	Length	Code	Price Each
No. 154	3¾ inches	YEFDO	$0.50

No. 628 Line and Surface Level

The ends of this level are equipped with open eyelets so that it can be easily strung on a line. The base is ground flat so that it can be used as a surface as well as a line level. Made of brass tubing, nicely polished and nickel plated. Accurately set vials.

	Length	Weight Box	Code	Price Each
No. 628	3 inches	7 ozs.	ZABEN	$0.50

Equipment Levels

Used as Attachments for Machines and Instruments

Same design and construction as No. 628 above, but without eyelets. For attachment to machinery and instruments. Also makes a useful pocket level. Full nickel finish.

	Length	Weight Box	Code	Price Each
No. 624	2 inches	4 ozs.	ZAAHS	$0.35
No. 625	3 inches	6 ozs.	ZAARD	.40

Nickel-Plated Pocket Levels

These levels are made from hexagon brass tubing, fully polished and nickel plated. They make very convenient and serviceable pocket levels.

	Length	Weight Box	Code	Price Each
No. 611	2½ inches	5 ozs.	YUVHA	$0.50
No. 612	3½ inches	12 ozs.	YUVIK	.60

Packed six in a box.

Iron Pocket Levels

Made of smooth iron castings with carefully milled bases and accurately set plain vials. Finished in black enamel.

	Length	Weight Box	Code	Price Each
No. 501	2½ inches	1⅛ lbs.	YOWFE	$0.55
No. 502	3½ inches	1⅞ lbs.	YOWHO	.60

Packed six in a box.

Iron Bench Levels

Made of smooth, well-seasoned gray iron castings. The base and top are accurately ground, the edges are polished and the body finished in glossy black enamel.

The vials are accurately set in the frame.

	Length	Weight	Code	Price Each
No. 503	4 inches	5 ozs.	YOWKY	$0.85
No. 504	6 inches	6 ozs.	YOWUJ	1.00

Packed one in a box.

Iron Levels

Grooved Base and Double Plumb

No. 505V

Nos. 506V and 507V

Nos. 509V and 510V

The frames of these levels are made of smooth, well-seasoned, gray iron castings. The tops and bottoms are accurately ground and the edges nicely polished, while the bodies are finished in glossy black enamel.

The base has an accurately milled V-groove its entire length for use in lining shafting, piping, and similar uses. This groove does not interfere in any way with the use of the level for all ordinary purposes.

Each level is fitted with one high-grade level vial and two plumb vials. These are accurately set in the frame and well protected from breakage.

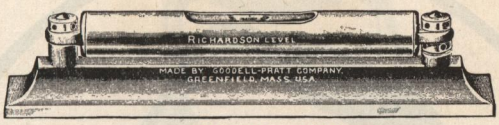
The 6, 9 and 12 inch sizes have closed ends and the 18 and 24 inch sizes open ends, as shown above.

	Length	Weight	Code	Price Each
No. 505V	6 inches	⅝ lbs.	YOYEG	$1.85
No. 506V	9 inches	1 lbs.	YOYJO	2.05
No. 507V	12 inches	1¼ lbs.	YOYOJ	2.10
No. 509V	18 inches	2½ lbs.	YOZGA	3.00
No. 510V	24 inches	3¼ lbs.	YOZKO	3.50

Packed one in a box.

Adjustable Bench Levels

Plain Vials



Nos. 514, 515 and 516

Equipped with sensitive vials solidly set in a brass tube which is provided with a very close and accurate means of adjustment. The bases are accurately ground and finished in glossy black enamel. The rest of the level is finely polished and nickel plated.

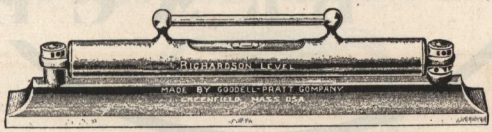
The 12-inch size is provided with a handle same as No. 722 below.

	Length	Weight	Code	Price Each
No. 514	4 inches	5/16 lb.	YUARD	$1.75
No. 515	6 inches	11/16 lb.	YUAWJ	2.00
No. 516	8 inches	1 1/8 lbs.	YUBEN	2.25
No. 717	12 inches	3 lbs.	ZARUJ	3.50

The 4, 6 and 8 inch are packed one in a box.
The 12 inch is packed one in a wooden box.

Adjustable Bench Levels

Internally Ground and Graduated Vials



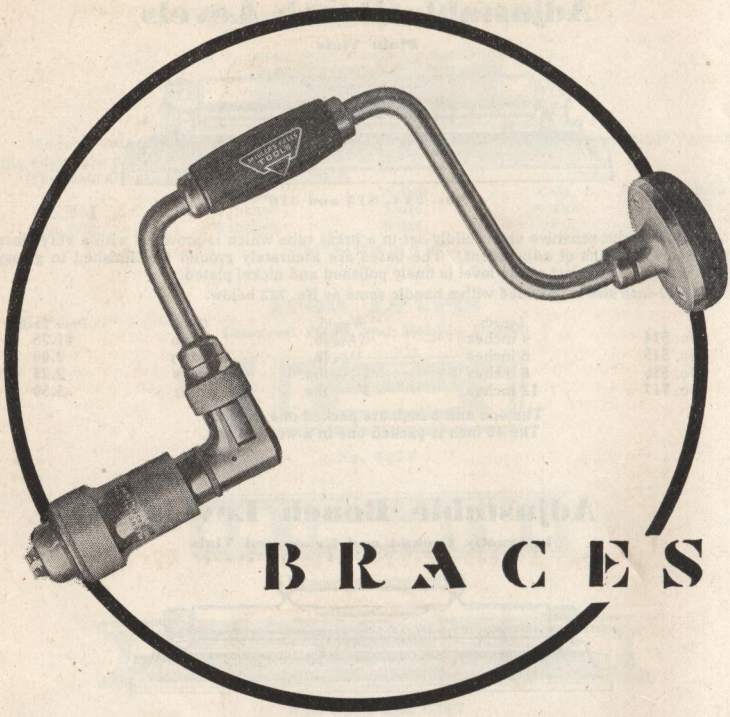
These levels will meet the requirements of the most particular users. All the vials used are accurately ground and graduated, and each one is inspected before and after being set. The adjustment is close and positive.

The handles not only add to the convenience and attractiveness of the tools, but also form efficient protectors for the vials. On all the larger sizes, the supports for the handles are fastened directly to the base, so that the tube containing the vial is not disturbed in handling. Where accurate work is essential, this feature is particularly valuable, as it enables the operator to handle the level without danger of effecting its accuracy by the heat of the hand.

The bases of these levels are accurately ground and are finished in black enamel. All the tubes are polished and nickel plated.

	Length	Weight	Code	Price Each
No. 719	4 inches	3/4 lb.	ZASAF	$3.25
No. 720	6 inches	3/4 lb.	ZASFA	4.00
No. 722	12 inches	3 lbs.	ZASJO	6.50

The 4, 6, and 8 inch are packed one in a box.
The 12 inch is packed one in a wooden box.



BRACES

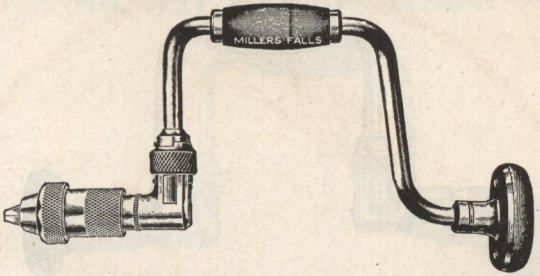
A bit brace is one of the most essential tools made. They have been one of the major lines of Millers Falls tools for over half a century and have always held an outstanding position for quality and fine design.

They are offered in a great variety of styles, sweeps and finishes to satisfy every legitimate requirement. It is a complete line in every sense of the word and the trade can concentrate on it to advantage.

Every detail in the manufacture is watched with care. Chuck shells, chuck bodies, ratchet mechanisms, sweeps, handles and heads are designed and executed to give a wealth of satisfactory service.

No matter what grade of brace may be selected, it represents a big value. The finish on the better styles cannot be excelled, and even in the cheaper grades the finish is better than would usually be expected.

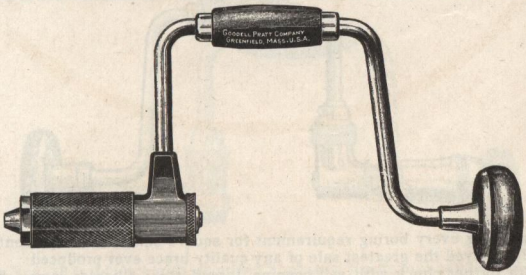
Nos. 769-773 Ratchet Braces



The finest bit brace produced. Ball bearing at every possible point, every constructional detail refined and the entire tool beautifully finished. Equipped with Lion ball bearing chuck to hold regular square shanks, No. 1 Morse Taper and round shanks from ⅛ to ½ inch in diameter. Boxed ratchet with ring shift. Full steel clad, ball bearing head. Head and handle finely finished tropical hardwood. Handle has metal inserted rings. All exposed metal parts heavily nickeled and highly buffed.

	Sweep	Weight	Code	Price Each
No. 769	16 inches	4½ lbs.	ABACK	$6.75
No. 770	14 inches	4 lbs.	ABACU	6.40
No. 771	12 inches	3½ lbs.	ABAFT	6.25
No. 772	10 inches	3⅜ lbs.	ABAND	6.10
No. 773	8 inches	3 lbs.	ABASK	6.10

Nos. 2510-2512 Ratchet Braces

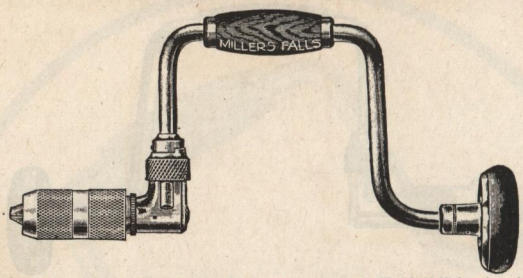


A fine heavy duty tool with a universal chuck, new patented concealed ratchet mechanism and drop-forged steel socket. All-steel chuck holds square and No. 1 Morse Taper and plain round shanks from ⅛ to ½ inch in diameter. Full steel clad, ball bearing head. Head and handle made of finely finished tropical hardwood. Knurled chuck shell has a pleasing black oil finish. Forged steel socket red enameled. All other exposed steel parts heavily nickeled and buffed.

	Sweep	Weight	Code	Price Each
No. 2510	10 inches	3¼ lbs.	ZOFOM	$5.90
No. 2512	12 inches	3½ lbs.	ZOFOT	6.05

Packed two in a box.

Nos. 730-733 Ratchet Braces



A fine quality brace, popularly known for years as the "Holdall," having been one of the first to be equipped with the universal type or "Master" chuck holding square, No. 1 Morse Taper and plain round shanks from ⅛ to ½ inch in diameter.

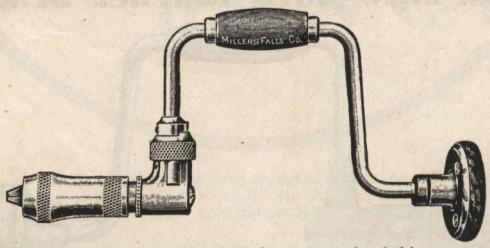
Boxed ratchet mechanism with ring shift. Steel clad, ball bearing head. Handle has inserted metal rings. Head and handle of finely finished tropical hardwood.

All exposed metal parts nicely polished, nickel plated and buffed.

	Sweep	Weight	Code	Price Each
No. 730	14 inches	3½ lbs.	ABBEY	$5.50
No. 731	12 inches	3¼ lbs.	ABBOT	5.40
No. 732	10 inches	3⅛ lbs.	ABDIC	5.20
No. 733	8 inches	2¾ lbs.	ABDOK	5.20

Packed two in a box.

Nos. 30-34 Ratchet Braces



This brace meeting every boring requirement for square shank bits represents a fine value and has probably enjoyed the greatest sale of any quality brace ever produced.

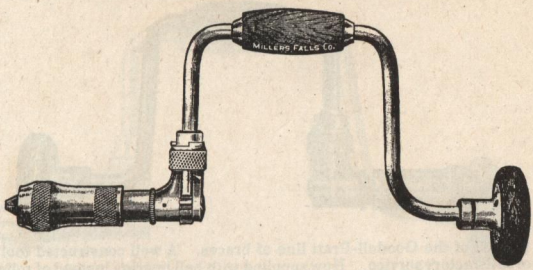
Equipped with Barber chuck with self-opening, forged steel alligator jaws. Steel clad, ball bearing head. Handle has inserted metal rings. Boxed ratchet with ring shift. Head and handle finely finished tropical hardwood.

All exposed metal parts nicely polished, nickel plated and buffed.

	Sweep	Weight	Code	Price Each
No. 30	14 inches	3⅜ lbs.	ABSCO	$5.40
No. 31	12 inches	3 lbs.	ABSEN	5.20
No. 32	10 inches	2⅞ lbs.	ABSOL	5.00
No. 33	8 inches	2½ lbs.	ABSIK	5.00
No. 34	6 inches	2¼ lbs.	ABSTA	5.00

Packed two in a box.

No. 321 Ratchet Brace



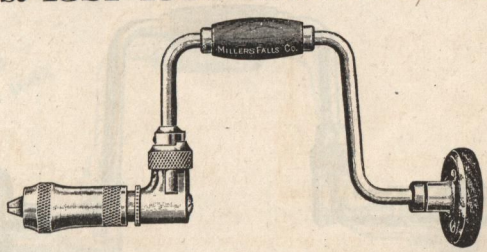
A sturdy, serviceable brace equipped with a Barber chuck with self-opening, forged steel alligator jaws. Semi-boxed ratchet with ring shift. Ball bearing head. Handle has inserted metal rings. Head and handle mahogany finished hardwood.

All exposed metal parts polished and nickel plated.

	Sweep	Weight	Code	Price Each
No. 321	12 inches	2⅞ lbs.	ACHEI	$4.50

Packed two in a box.

Nos. 1321-1324 Ratchet Braces



Similar to Nos. 30 to 34, but with ebonized hardwood heads and handles.

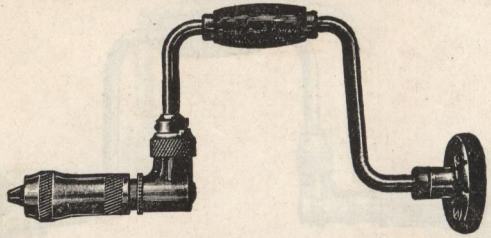
Boxed ratchet mechanism, with ring shift. Barber chuck with self-opening, forged steel alligator jaws. Ball bearing, steel clad head. Handle has inserted metal rings.

All exposed metal parts polished, nickel plated and buffed.

	Sweep	Weight	Code	Price Each
No. 1321	12 inches	3 lbs.	ACRIM	$4.00
No. 1322	10 inches	2¾ lbs.	ACROB	3.85
No. 1323	8 inches	2½ lbs.	ACTIV	3.85
No. 1324	6 inches	2¼ lbs.	ACTOR	3.85

Packed two in a box.

Nos. 7006-7014 Ratchet Braces



The most popular of the Goodell-Pratt line of braces. A well constructed tool capable of delivering years of satisfactory service. Now supplied with ball bearing instead of roller bearing head.

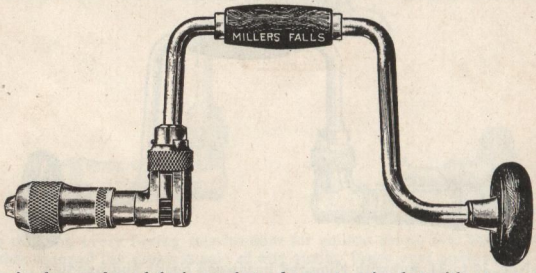
All-steel chuck with self-opening, forged steel alligator jaws. Boxed ratchet with ring shift. Ball bearing, steel clad head. Handle has inserted metal rings. Head and handle mahogany finished hardwood.

All exposed steel parts polished, nickel plated and buffed.

	Sweep	Weight	Code	Price Each
No. 7006	6 inches	2½ lbs.	ZORZA	$3.85
No. 7008	8 inches	2⅝ lbs.	ZORZY	3.85
No. 7010	10 inches	2¾ lbs.	ZOSAT	3.85
No. 7012	12 inches	2⅞ lbs.	ZOSEV	4.00
No. 7014	14 inches	3 lbs.	ZOSOY	4.15

Packed two in a box.

Nos. 421-423 Ratchet Braces



An inexpensive brace of good design and sturdy construction but without some of the refinements in the higher priced tools.

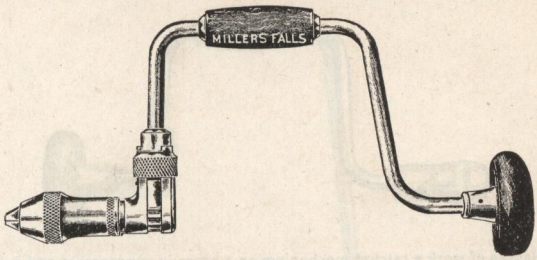
Barber chuck with improved malleable alligator jaws. Semi-boxed ratchet with ring shift. Ball bearing, steel clad head. Handle with inserted metal rings. Head and handle mahogany finished hardwood.

Exposed metal parts polished and nickel plated.

	Sweep	Weight	Code	Price Each
No. 421	12 inches	2¾ lbs.	ADJEC	$3.20
No. 422	10 inches	2⅝ lbs.	ADJOU	3.10
No. 423	8 inches	2⅜ lbs.	ADJUN	3.10

Packed two in a box.

Nos. 1661-1663 Ratchet Braces



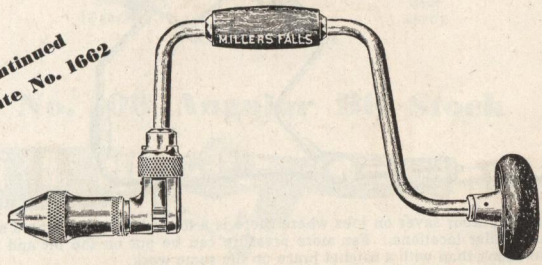
A low-priced brace of popular design that enjoys a tremendous sale. Good substantial construction throughout insures years of useful service. Barber chuck with improved malleable alligator jaws. Semi-boxed ratchet with ring shift. Head and handle mahogany finished hardwood. Handle has inserted metal rings. Exposed metal parts polished and nickel plated.

	Sweep	Weight	Code	Price Each
No. 1661	12 inches	2⅜ lbs.	ADVER	$2.35
No. 1662	10 inches	2¼ lbs.	ADVOC	2.25
No. 1663	8 inches	2 lbs.	AEOLI	2.25

Packed six in a box.

No. 162 Ratchet Brace

Discontinued
Substitute No. 1662



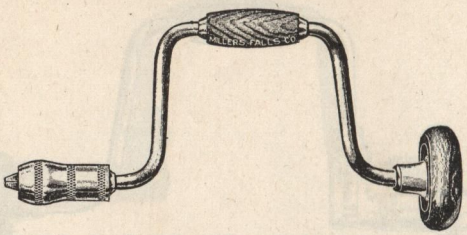
Exactly the same as No. 1662, but without the nickel finish. Made with 10-inch sweep only. Barber chuck with improved alligator jaws. Semi-boxed ratchet with ring shift. Head and handle mahogany finished hardwood. Handle has inserted metal rings.

Exposed metal parts polished.

	Sweep	Weight	Code	Price Each
No. 162	10 inches	2¼ lbs.	AFFAB	$2.10

Packed six in a box.

Nos. 141-143 Plain Braces

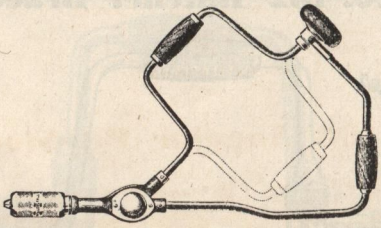


On many classes of work a ratchet mechanism on a brace is unnecessary and a plain or sleeve brace fills the requirements. This is a low-priced brace with inexpensive finish. Barber chuck with alligator jaws. Head has a plain bearing and is screwed securely to the quill. Head and handle mahogany stained hardwood. Exposed metal parts polished.

	Sweep	Weight	Code	Price Each
No. 141	12 inches	1⅞ lbs.	AFIDA	$1.10
No. 142	10 inches	1¾ lbs.	AFILI	1.05
No. 143	8 inches	1⅝ lbs.	AFINO	1.05

Packed six in a box.

No. 502 Corner Brace



A great time and labor saver on jobs where there is a lot of boring in corners against walls and beams and similar locations. Far more pressure can be put on the bit and more power delivered to the chuck than with a ratchet brace on the same work.

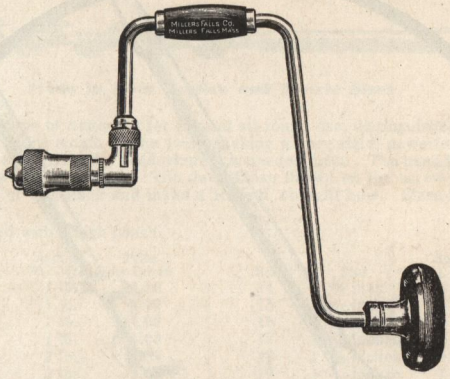
Master chuck holds square, No. 1 Morse Taper and round shanks from ⅛ to ½ inch in diameter. Machine-cut, case-hardened steel gears, fully enclosed. Ball thrust bearing at base of chuck. Ball bearing head. Handles have inserted metal rings. Frame black enameled. Head and handles mahogany finished hardwood. Length, 17 inches.

All exposed metal parts, except frame, polished, nickel plated and buffed.

	Sweep	Weight	Code	Price Each
No. 502	10 inches	4 lbs.	AGAPE	$9.40

Packed two in a box.

No. 7312 Whimble Brace



A double leverage brace for extra heavy work as encountered in ship, dock, car and bridge building and other heavy construction.

Equipped with Lion ball bearing chuck holding square, No. 1 Morse Taper and round shanks from ⅛ to ½ inch in diameter.

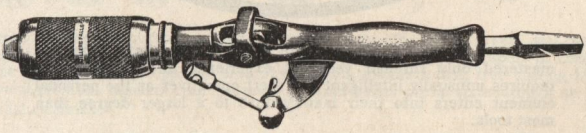
Heavy $^{9}/_{16}$-inch sweep rod. Boxed ratchet with ring shift. Ball bearing, steel clad head. Handle has inserted metal rings. Head and handle mahogany finished hardwood.

Exposed metal parts nicely polished, nickel plated and buffed.

	Sweep	Weight	Code	Price Each
No. 7312	12 inches	3¾ lbs.	ASTUT	$5.65

Packed two in a box.

No. 108 Angular Bit Stock



This tool used with a bit brace or breast drill makes it possible to drill holes at angles ranging from 180 to 125 degrees.

Equipped with Master chuck holding square, No. 1 Morse Taper and round shanks from ⅛ to ½ inch in diameter. Steel joints and pins. Hardened steel shank. Frame castings black enameled.

All exposed metal parts polished.

	Length	Weight	Code	Price Each
No. 108	12½ inches	2 lbs.	ACABA	$3.20

Packed one in a box.

AUGER-BITS

The manufacture of really high quality auger bits is a fine art mastered only through years of experience and research. It requires unusually intelligent and alert operatives as the personal element enters into their manufacture to a larger degree than most tools.

They are forged from high quality steel with uniform twists that provide adequate chip clearance and cutting edges, spurs and screws that have just the proper relation to one another to produce the best results on the particular class of work they are designed for.

They are beautifully polished all over, the cutting edges honed, the spurs carefully sharpened, the screws cleanly threaded at the proper pitch and the bit stock shanks machined.

The heat-treatment is uniform and produces bits of true temper ready to cut thousands of clean, straight holes.

No. 542 Solid Center Auger Bit

Made in Both English and Metric Sizes

The most popular type of Auger Bit for general all-round use, distinguished by a solid stem or core running the entire length of the twist, making a very rigid, powerful tool throughout and putting plenty of strength in the head where it is needed most. The head has two extension lips and spurs and two cutting edges. The deep, clean thread on the screw is pitched to pull the bit through hard or soft wood and make a smooth, straight hole. Sizes below are in sixteenths of an inch.

Beautifully finished with a high polish.

No.	Size	Approx. Wt. Dozen	Price per Dozen
3	3/16 inch	1 lb.	$4.50
4	1/4 inch	1 lb.	4.00
5	5/16 inch	1 lb.	4.00
6	3/8 inch	1 lb.	4.00
7	7/16 inch	2 lbs.	4.50
8	1/2 inch	2 lbs.	5.00
9	9/16 inch	2 lbs.	5.50
10	5/8 inch	3 lbs.	6.00
11	11/16 inch	3 lbs.	7.00
12	3/4 inch	4 lbs.	7.00
13	13/16 inch	4 lbs.	8.00
14	7/8 inch	4 lbs.	$8.00
15	15/16 inch	5 lbs.	9.00
16	1 inch	6 lbs.	9.00
17	1 1/16 inches	6 lbs.	10.50
18	1 1/8 inches	6 lbs.	10.50
19	1 3/16 inches	7 lbs.	12.00
20	1 1/4 inches	8 lbs.	12.00
21	1 5/16 inches	8 lbs.	13.50
22	1 3/8 inches	9 lbs.	13.50
23	1 7/16 inches	9 lbs.	15.00
24	1 1/2 inches	10 lbs.	15.00

Code—BASCO

Packed six in a box.

No. 531 Single Twist Auger Bits

Unsurpassed for general purpose boring and particularly efficient in green, wet, spongy or knotty woods or in boring with the grain. The single cutting edge and spur, in conjunction with clearance provided on the opposite side of the head, makes a fast, free cutting bit. The deep single twist provides unusual chip clearance. Sizes below are in sixteenths of an inch.

Highly polished finish.

No.	Size	Approx. Wt. Dozen	Price per Dozen
4	1/4 inch	1 1/4 lbs.	$5.00
5	5/16 inch	1 1/4 lbs.	5.00
6	3/8 inch	1 1/4 lbs.	5.00
7	7/16 inch	2 lbs.	5.00
8	1/2 inch	2 lbs.	5.00
9	9/16 inch	2 1/2 lbs.	6.00
10	5/8 inch	3 lbs.	6.00
11	11/16 inch	3 lbs.	$7.00
12	3/4 inch	4 lbs.	7.00
13	13/16 inch	5 lbs.	8.25
14	7/8 inch	5 lbs.	8.25
15	15/16 inch	6 lbs.	9.50
16	1 inch	6 1/2 lbs.	9.50

Code—BABUT

Packed six in a box.

Auger Bits in Sets

These rolls provide by far the best method of keeping a set of auger bits together, of protecting their cutting edges and keeping their fine finish. They are flexible, compact, easy to carry and can be packed away in a small space.

Made of heavy, waterproof Fabricoid with tape-bound edges and a jacket for each individual bit with the size clearly marked on it. Can be securely closed by means of the canvas strap.

Specify No. 2542 and number of quarters wanted for No. 542 Solid Center Sets and No. 2531 for No. 531 Single Twist Sets. For example: No. 2542—32½ quarters designates a set of 32½ quarters of Auger Bit No. 542.

Code No. 2542—BASFY No. 2531—BEDIM

Quarters	Assortment by Sixteenths of an Inch	Price No. 2542	Price No. 2531
32½	4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, and 16, one each	$8.35	$9.90
25½	4, 5, 6, 7, 8, 9, 10, 11, 12, 14, and 16, one each	6.90	8.20
24	4, 5, 7, 9, 11 and 12 one each and 6, 8 and 10, two each	6.70	8.05
22½	5, 7, 9, 10, 11, and 12 one each and 4, 6, and 8, two each	6.50	7.95
21	5, 6, 7, 9, 10, 11, and 12 one each and 4 and 8, two each	6.20	7.40
20½	4, 5, 6, 7, 8, 10, 12, 14, and 16, one each	5.40	6.70
18¾	4, 5, 6, 8, 10, 12, 14, and 16, one each	4.85	6.55
18	4, 5, 6, 7, 8, 9, 10, 11, and 12, one each	5.05	6.35
17½	4, 6, 8, 10, 12, 14, and 16, one each	4.50	5.65
15¼	4, 5, 6, 8, 10, 12, and 16, one each	4.15	5.20
14	4, 6, 8, 10, 12, and 16, one each	3.60	4.75
11¼	4, 5, 6, 8, 10, and 12, one each	3.20	4.30

Canvas rolls only (without bits) for 32½ quarters (13 bits) each, $1.30.

No. 935 Ship Auger Bits

Recommended particularly for hard tropical woods. A special heat-treatment is given to make these bits stand up on this severe service. Screw point has a deep, clean thread with moderately coarse feed. Well adapted for boring cross or end grain domestic hardwoods. It is easily resharpened. Nicely polished.

No.	Size	Approx. Wt. Dozen	Price per Dozen
4	1/4 inch	1 lb.	$4.00
5	5/16 inch	1 lb.	4.00
6	3/8 inch	1 lb.	4.00
7	7/16 inch	1 lb.	4.50
8	1/2 inch	2 lbs.	5.00
9	9/16 inch	2 lbs.	5.50
10	5/8 inch	3 lbs.	6.00
11	11/16 inch	3 lbs.	7.00
12	3/4 inch	4 lbs.	7.00
13	13/16 inch	4 lbs.	$8.00
14	7/8 inch	4 lbs.	8.00
15	15/16 inch	5 lbs.	9.00
16	1 inch	6 lbs.	9.00
18	1 1/8 inches	6 lbs.	10.50
20	1 1/4 inches	8 lbs.	12.00
22	1 3/8 inches	9 lbs.	13.50
24	1 1/2 inches	10 lbs.	15.00

Code—BAUST

Packed six in a box.

No. 552 Solid Center Car Bit

This bit is the same as the No. 542 Solid Center Bits, but much longer. Length of twist, 12 inches, length overall, 18 inches. Sizes listed below in sixteenths of an inch.

Highly polished finish.

No.	Size	Approx. Wt. Dozen	Price per Dozen
4	1/4 inch	2 1/4 lbs.	$9.00
5	5/16 inch	2 1/2 lbs.	9.00
6	3/8 inch	3 lbs.	9.00
7	7/16 inch	3 1/2 lbs.	10.00
8	1/2 inch	4 1/2 lbs.	11.25
9	9/16 inch	4 3/4 lbs.	12.50
10	5/8 inch	5 1/4 lbs.	13.75
11	11/16 inch	6 1/2 lbs.	15.00
12	3/4 inch	7 lbs.	16.25
13	13/16 inch	8 lbs.	17.50
14	7/8 inch	8 lbs.	19.00
15	15/16 inch	8 lbs.	$20.50
16	1 inch	9 1/2 lbs.	22.00
17	1 1/16 inches	12 lbs.	26.00
18	1 1/8 inches	14 lbs.	26.00
19	1 3/16 inches	14 1/2 lbs.	30.00
20	1 1/4 inches	15 lbs.	30.00
21	1 5/16 inches	15 1/2 lbs.	34.00
22	1 3/8 inches	18 lbs.	34.00
23	1 7/16 inches	18 lbs.	38.00
24	1 1/2 inches	19 lbs.	38.00

Code—BARBA

Packed six in a box up to and including No. 16. Larger sizes three in a box.

No. 922 Ship Auger Car Bits

A long, single twist bit without spur which is specially efficient for boring in rough timbers and woods with a firm grain. Cuts easily and freely to the full depth of the twist. Length of twist, 12 inches; overall length, 18 inches.

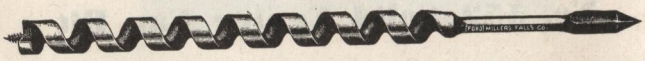
High all-over polished finish on sizes up to and including No. 16. Larger sizes have black hollows.

No.	Size	Approx. Wt. Dozen	Price per Dozen
4	1/4 inch	2 lbs.	$11.00
5	5/16 inch	3 lbs.	11.00
6	3/8 inch	3 lbs.	11.00
7	7/16 inch	4 1/4 lbs.	11.00
8	1/2 inch	6 lbs.	11.00
9	9/16 inch	6 lbs.	11.00
10	5/8 inch	7 1/2 lbs.	11.00
11	11/16 inch	8 1/2 lbs.	12.00
12	3/4 inch	10 lbs.	12.00
13	13/16 inch	11 1/2 lbs.	13.00
14	7/8 inch	12 1/2 lbs.	13.00
15	15/16 inch	13 1/2 lbs.	$14.50
16	1 inch	16 lbs.	14.50
17	1 1/16 inches	21 lbs.	16.00
18	1 1/8 inches	22 lbs.	16.00
19	1 3/16 inches	25 lbs.	18.00
20	1 1/4 inches	28 lbs.	18.00
21	1 5/16 inches	30 lbs.	20.00
22	1 3/8 inches	30 lbs.	20.00
23	1 7/16 inches	34 lbs.	23.00
24	1 1/2 inches	36 lbs.	23.00

Code—BARET

Packed six in a box up to and including No. 16. Larger sizes three in a box.

No. 912 Ship Augers



Same pattern as No. 922, but with heavy square shank designed for use in an auger handle or a metal crank or handle welded to the shank.

Sizes Nos. 4 and 5 have an 8-inch twist and are 13 inches overall; sizes Nos. 6 to 8 a 10-inch twist and are 14 inches overall; sizes Nos. 9 to 16 a 12-inch twist and are 18 inches overall and sizes No. 17 up a 15-inch twist and 20 inches overall.

No.	Size	Approx. Wt. Dozen	Price per Dozen
4	1/4 inch	2 lbs.	$11.00
5	5/16 inch	2 lbs.	11.00
6	3/8 inch	2 1/2 lbs.	11.00
7	7/16 inch	3 1/2 lbs.	11.00
8	1/2 inch	5 1/2 lbs.	11.00
9	9/16 inch	6 3/4 lbs.	11.00
10	5/8 inch	8 lbs.	11.00
11	11/16 inch	9 lbs.	12.00
12	3/4 inch	10 1/2 lbs.	12.00
13	13/16 inch	12 lbs.	13.00
14	7/8 inch	12 1/2 lbs.	13.00
15	15/16 inch	13 lbs.	14.50
16	1 inch	17 1/2 lbs.	14.50
17	1 1/16 inches	19 lbs.	16.00
18	1 1/8 inches	24 lbs.	16.00
19	1 3/16 inches	27 lbs.	$18.00
20	1 1/4 inches	29 lbs.	18.00
21	1 5/16 inches	36 lbs.	20.00
22	1 3/8 inches	38 lbs.	20.00
23	1 7/16 inches	38 lbs.	23.00
24	1 1/2 inches	39 lbs.	23.00
25	1 9/16 inches	39 lbs.	27.00
26	1 5/8 inches	41 lbs.	27.00
27	1 11/16 inches	44 lbs.	32.00
28	1 3/4 inches	45 lbs.	32.00
29	1 13/16 inches	46 lbs.	38.00
30	1 7/8 inches	48 lbs.	38.00
31	1 15/16 inches	50 lbs.	45.00
32	2 inches	52 lbs.	45.00

Code—BARME

Packed six in a box up to and including No. 16; sizes 17 to 30 inclusive, three in a box; and sizes 31 and 32 wrapped singly in heavy paper.

No. 812 Ship Augers

Same as No. 912 Series, but without screw point. Recommended where particularly straight boring is required because it will not drift off with the grain of the wood.

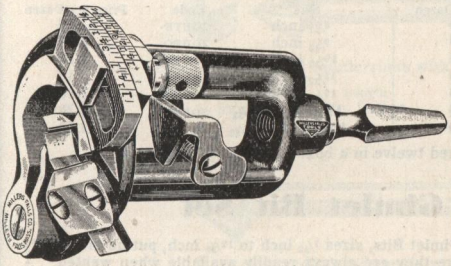
Full polished twists and rounds up to and including No. 16. Larger sizes have black hollows.

No.	Size	Approx. Wt. Dozen	Price per Dozen
4	1/4 inch	2 lbs.	$13.20
5	5/16 inch	2 lbs.	13.20
6	3/8 inch	2 1/2 lbs.	13.20
7	7/16 inch	3 1/2 lbs.	13.20
8	1/2 inch	5 1/2 lbs.	13.20
9	9/16 inch	6 1/2 lbs.	13.20
10	5/8 inch	8 lbs.	13.20
11	11/16 inch	9 lbs.	14.40
12	3/4 inch	10 1/2 lbs.	14.40
13	13/16 inch	12 lbs.	15.60
14	7/8 inch	12 1/2 lbs.	15.60
15	15/16 inch	13 lbs.	17.40
16	1 inch	17 1/2 lbs.	17.40
17	1 1/16 inches	19 lbs.	19.20
18	1 1/8 inches	24 lbs.	19.20
19	1 3/16 inches	27 lbs.	$21.60
20	1 1/4 inches	29 lbs.	21.60
21	1 5/16 inches	36 lbs.	24.00
22	1 3/8 inches	38 lbs.	24.00
23	1 7/16 inches	38 lbs.	27.60
24	1 1/2 inches	39 lbs.	27.60
25	1 9/16 inches	39 lbs.	32.40
26	1 5/8 inches	41 lbs.	32.40
27	1 11/16 inches	44 lbs.	38.40
28	1 3/4 inches	45 lbs.	38.40
29	1 13/16 inches	46 lbs.	45.60
30	1 7/8 inches	48 lbs.	45.60
31	1 15/16 inches	50 lbs.	54.00
32	2 inches	52 lbs.	54.00

Code—BARON

Packed six in a box up to and including No. 16; sizes 17 to 30 three in a box, and sizes 31 and 32 wrapped singly in heavy paper.

No. 3 Hollow Auger



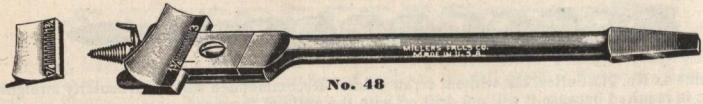
Adjustable to cut tenons from 1/4 to 1 1/4 inches. Graduated index. Stop gauge to regulate length. Knife carefully tempered and sharpened. Steel adjusting screw. Head castings of malleable iron. Frame enameled black and red. Bright parts polished.

Furnished with 1/2-inch round shank, if desired, without extra charge.

	Capacity	Weight	Code	Price Each
No. 3	1/4 to 1 1/4 inches	3/4 lb.	SAYND	$6.75

Packed one in a box.

Expansive Bits



No. 48

A finely made and beautifully finished bit of the Clark Pattern, with spurs, cutting edges, throats, screws and cutters designed to function in unison to give a fast, clean cutting bit. Made of the highest quality special bit steel throughout. Each bit equipped with two cutters.

All parts of the bit highly polished.

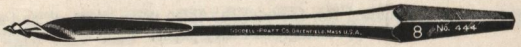
	Capacity	Weight	Code	Price Each
No. 47	½ to 1½ inches	⅜ lb.	BARDO	$1.50
No. 48	⅞ to 3 inches	½ lb.	BOLLO	2.20

Packed one in a box; six boxes in a carton.

Extra Cutters

	Fitting	Capacity	Price per Dozen
No. 1	No. 47	½ to ⅞ inches	$3.00
No. 2	No. 47	⅞ to 1½ inches	3.75
No. 3	No. 48	⅞ to 1¾ inches	5.25
No. 4	No. 48	1¾ to 3 inches	6.00

No. 444 Gimlet Bits



A very fine fast cutting line of Gimlet Bits hand forged from crucible steel, carefully hardened and oil tempered and sharpened by hand. Clean cut screws that draw the bits into the work.

Sizes given below are standard gimlet, which are slightly over the actual size of the smaller bits. Length overall, 4 to 6½ inches; average weight per box, ⅝ pound.

Size	Code	Price per Dozen	Size	Code	Price per Dozen
1/32 inch	ZOUSA	$2.20	8/32 inch	ZOUTE	$2.20
2/32 inch	ZOUSE	2.20	9/32 inch	ZOUTO	2.20
3/32 inch	ZOUSM	2.20	10/32 inch	ZOUTS	2.20
4/32 inch	ZOUSO	2.20	11/32 inch	ZOUTY	2.40
5/32 inch	ZOUSS	2.20	12/32 inch	ZOUVO	2.40
6/32 inch	ZOUST	2.20	Asst. 4/32 to 8/32	ZOUVX	2.20
7/32 inch	ZOUTA	2.20	Asst. 1/32 to 12/32	ZOUWA	2.30

Packed twelve in a box.

No. 577 Gimlet Bit Set

This set consists of twelve No. 444 Gimlet Bits, sizes 1/32 inch to 12/32 inch, put up in a nicely finished, handy round wooden box where they are always readily available when wanted. A most useful set in a convenient, permanent container.

	Weight	Code	Price per Set
No. 577 Set Complete	1½ lbs.	YUMYA	$3.10

Packed one in a box.

No. 652 Countersink

With Round Shank

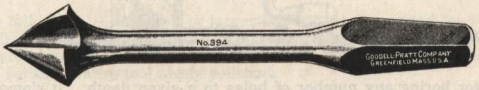
Two-lipped, for wood, brass, copper, bakelite, fibre, etc. Round shank, ¼ inch in diameter, for use in three-jawed chucks. Carefully hardened.

	Extreme Diameter	Length	Weight Doz.	Code	Price per Dozen
No. 652	9/16 inch	1¾ inches	⅜ lb.	ZAEGS	$3.20

Packed twelve in a box.

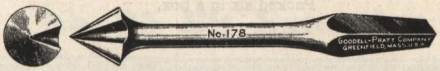
Forged Countersinks

An unusually fine line of countersinks, hammer forged from the very best quality of tool steel obtainable for this class of tool. Their hammer refined steel is correctly hardened and well polished, and then carefully tempered to a straw color to withstand the grueling work expected of them. The cutting edges are clean and sharp.



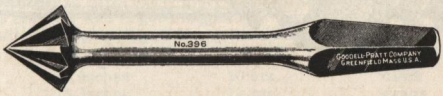
Two-lipped wood countersinks with square bit brace shanks.

	Extreme Diameter	Length	Weight	Code	Price per Dozen
No. 177	½ inch	4¼ inches	1 lb.	YEITS	$5.00
No. 394	¾ inch	4¼ inches	1¾ lbs.	YOFEM	5.50



Single-lipped metal countersinks with square bit brace shanks.

	Extreme Diameter	Length	Weight	Code	Price per Dozen
No. 178	½ inch	4¼ inches	⅞ lb.	YEIZY	$5.00



Rose countersinks for metals with bit brace shanks.

	Extreme Diameter	Length	Weight	Code	Price per Dozen
No. 396	¾ inch	4¼ inches	1½ lbs.	YOFME	$5.00
No. 691	1¼ inches	4¼ inches	3 lbs.	ZAMUD	8.00

Packed twelve in a box.

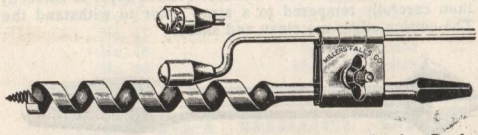
No. 397 Square Reamer

Made of the very best steel procurable for the purpose. Hammer forged and very carefully hardened, polished and tempered.

	Extreme Diameter	Length	Weight	Code	Price per Dozen
No. 397	3/16 inch	6½ inches	2½ lbs.	YOFOP	$9.00

Packed twelve in a box.

No. 2 Bit Gauge

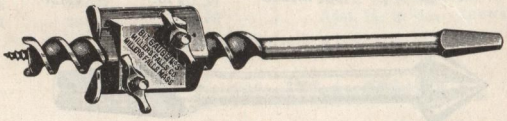


An attachment for boring any number of holes to a given depth. It clamps to the shank of any size auger bit and tightens on the bit and gauge spindle at the same time. Contact ball revolves on ball bearings, reducing the friction and preventing defacement of the surface of the material being bored. Entire tool nickel plated.

	Length	Weight	Code	Price Each
No. 2	5¾ inches	⅛ lb.	APITI	$0.55

Packed six in a box.

No. 36 Bit Gauge



Fits any type of auger bit clamping securely to the twist of the bit. Clamp controlled by two steel wing nuts. Two smooth shoes prevent marring of the work. Entire tool nickel plated.

	Length	Weight	Code	Price Each
No. 36	2 inches	3 ozs.	AWASA	$0.45

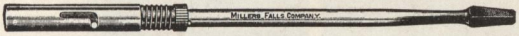
Packed six in a box.

No. 5 Bit Extension

Designed to follow a 5/8-inch bit or larger into its bore but should not be used with bits over 11/16 inch in diameter. The chuck is made of special tool steel heat treated for extreme toughness. The steel jaws are spring tempered and hold the bit securely. The steel socket is screwed and pinned to the rod or shank. The knurled nut controlling the chuck action is extra long to give a good grip. Entire tool well polished.

	Length	Weight	Code	Price Each
No. 5	12 inches	2/3 lb.	CAMPO	$2.05
No. 5	15 inches	5/8 lb.	CANAL	2.10
No. 5	18 inches	3/4 lb.	CANOR	2.15
No. 5	21 inches	7/8 lb.	CANDI	2.25
No. 5	24 inches	1 lb.	CANEY	2.30
No. 5	30 inches	1 1/4 lbs.	CANON	2.50

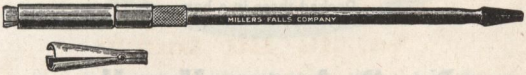
No. 11 Bit Extension



Designed to follow an 11/16-inch bit or larger but not recommended for bits larger than 12/16 inch. A neat, strong extension of the solid socket type with socket forced on to the shank and pinned. Chuck shell made of heavy seamless tubing is controlled by a coarse thread operated by turning the knurled collar. Entire tool nicely polished.

	Length	Weight	Code	Price Each
No. 11	15 inches	3/4 lb.	CAMBE	$2.30
No. 11	18 inches	1 lb.	CAMEL	2.35
No. 11	21 inches	1 1/8 lbs.	CAMFO	2.40
No. 11	24 inches	1 1/4 lbs.	CAMIS	2.50

No. 35 Bit Extension

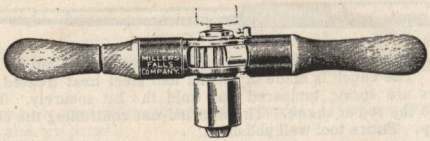


Designed to follow an 11/16-inch bit or larger but not recommended for continuous use on bits larger than 12/16 inch. The one-piece socket and shank construction of this extension makes it very strong. Chuck shell of extra heavy steel tubing. Drop-forged steel jaws positively seated in socket hold bits securely and in good alignment. Chuck operated by turning knurled collar. Upper hexagon portion for tightening with a wrench when desirable.

	Length	Weight	Code	Price Each
No. 35	12 inches	10 ozs.	CABIN	$2.20
No. 35	15 inches	11 ozs.	CABOS	2.25
No. 35	18 inches	13 ozs.	CABIO	2.30
No. 35	21 inches	14 ozs.	CACKO	2.35
No. 35	24 inches	16 ozs.	CADDY	2.45
No. 35	30 inches	18 ozs.	CADEN	2.60

Packed one in a box.

No. 4 Ratchet Auger Handle



A heavy duty handle equipped with a powerful ratchet mechanism that makes it particularly effective for use in corners and other restricted spaces. Ratchet, controlled by small lever, operates either left or right hand or can be positively locked.

Steadying handle at left can be removed and attached to top when working conditions make it desirable. Chuck holds practically all sizes of bit and auger shanks.

Metal frame and chuck shell black enameled; other exposed metal parts nickel plated. Handles selected ash with natural finish.

	Length	Weight	Code	Price Each
No. 4	15 inches	2¾ lbs.	CAGES	$4.45

Packed one in a box

No. 3 Auger Handle

A light handle built on a strong malleable iron frame. All ordinary sizes of bit and auger shanks held securely by tightening the heavy wing nut. Handles selected ash.

Frame black enameled. Wing nut rust-proofed.

	Length	Weight	Code	Price Each
No. 3	16 inches	1¼ lbs.	CAGIL	$1.35

Packed three in a box.

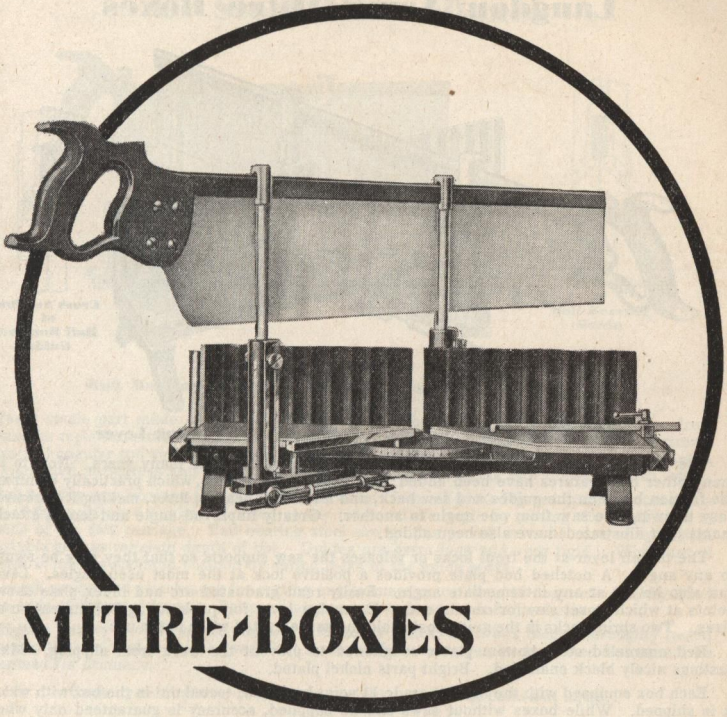
No. 2 Auger Handle

A stout wood handle holding all sizes of bits and all but the largest sizes of ship auger shanks. Augers are held by two 3-inch steel clamps tightened by means of two wing nuts. Handles straight grained, selected ash.

	Length	Weight	Code	Price Each
No. 2	17 inches	1¼ lbs.	CAGNE	$0.90

Packed six in a box.

MILLERS FALLS — GOODELL-PRATT



MITRE-BOXES

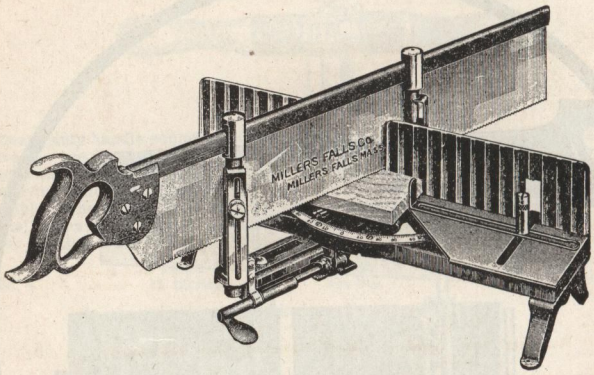
"Langdon Acme" and "Goodell All Steel" have been the predominating mitre boxes ever since their introduction. Their accuracy, easy handling and durability have been outstanding, and they truly represent the highest efficiency ever attained in a mitre box.

Now in line with the Millers Falls policy to constantly improve its products, ball bearing saw guides and ball bearing swinging levers or saw carriages have been added to their many other fine features. This gives a new freedom in operation and adjustment that will be greatly appreciated by the operator especially as they are added with no advance in price.

Several other types of boxes, each representing excellent values in their class, round out a very complete line.

GREENFIELD, MASSACHUSETTS

Langdon Acme Mitre Boxes



Cross Section of Ball Bearing Guide

Ball Bearing Saw Guides. Ball Bearing Swinging Lever

The Langdon Acme box has been the outstanding mitre box for many years. Now to its many other fine features have been added: ball bearing saw guides, which practically eliminate the friction between the guides and saw back, and a full ball bearing lever, making it extremely easy to swing the saw from one angle to another. Greatly improved angle and length attachments (not illustrated) have also been added.

The thumb lever at the front locks or releases the saw supports so that they may be swung to any angle. A notched bed plate provides a positive lock at the most used angles. Lever can also be set at any intermediate angle. Easily read graduated arc and index plate shows points at which to set saw for certain cuts. Extension lever for quick acting adjustment on all sizes. Two spring locks in the guide posts hold the saw elevated when not in use.

Red enameled steel bottom plates roughened to prevent the work from slipping. Main castings nicely black enameled. Bright parts nickel plated.

Each box equipped with the highest grade 11 point back saw, tested out in the box with which it is shipped. While boxes without saws can be supplied, accuracy is guaranteed only when saws are fitted at the factory.

Capacity—All sizes—10½ inches at right angles, 7 inches at mitre.

Prices Complete with Saw

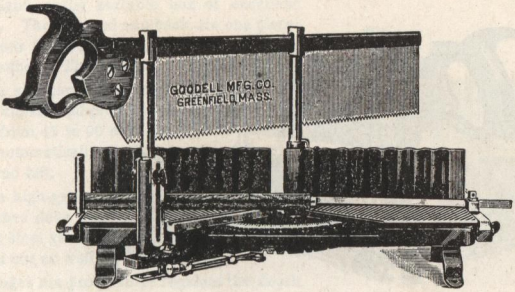
	Size Saw	Net Weight	Packed	Code	Price Each
No. 71A	22 x 4 inches	23 lbs.	34 lbs.	LACER	$24.95
No. 72A	24 x 4 inches	23½ lbs.	35 lbs.	LADDE	25.85
No. 73A	26 x 4 inches	24 lbs.	36 lbs.	LADIM	26.25
No. 74A	28 x 5 inches	25 lbs.	37 lbs.	LADLE	29.70
No. 75A	30 x 5 inches	25½ lbs.	38 lbs.	LAGER	31.55

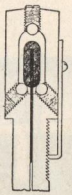
Prices without Saw

No. 1071A	For 4-inch Saw	21 lbs.	26 lbs.	LAIRD	$20.15
No. 1074A	For 5-inch Saw	22 lbs.	27 lbs.	LAITY	22.25

Packed one in a wood box.

All Steel Mitre Boxes





Cross Section of Ball Bearing Guide

Ball Bearing Saw Guides. Ball Bearing Saw Carriage

Every single part made of steel, making the box unbreakable and consequently free from expense for replacements and repairs. Design and construction the finest throughout. Extreme accuracy of angular and vertical cuts and wonderful durability. Two separate scales on quadrant, one graduated in degrees and one in a new framing scale for cutting roof timbers, finish, etc.

Ball bearing saw carriage swings freely right or left from 45 to 90 degrees and locks automatically at the most used angles. Locked at any intermediate angle by pulling the small knob at the side of the saw carriage. Ball bearing steel saw guides permit extreme ease of operation. Adjustable gauges regulate depth of cut. Guides are extra long and very rigid. When not in use saw is held in elevated position by spring locks in the guide posts.

Length gauge and attachment for cutting angles more acute than 45 degrees. Solidly fixed to the ends of the steel frame. Bottom plates scored to keep work from slipping.

Highest quality back saws are supplied with these boxes, each box being thoroughly tested out, using the saw that is shipped with it. Boxes without saws can be furnished but cannot be guaranteed for accuracy.

Capacity—All sizes—10½ inches at right angles; 7¼ inches at mitre.

Prices Complete with Saw

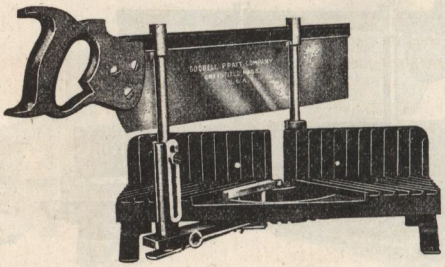
	Size Saw	Net Weight	Gross	Code	Price Each
No. 1244A	24 x 4 inches	20 lbs.	30 lbs.	ZITRE	$24.00
No. 1264A	26 x 4 inches	21 lbs.	31 lbs.	ZITUV	24.95
No. 1285A	28 x 5 inches	24 lbs.	35 lbs.	ZITWY	29.70
No. 1305A	30 x 5 inches	25 lbs.	37 lbs.	ZIUGH	31.50
No. 1306A	30 x 6 inches	26 lbs.	38 lbs.	ZIUHJ	34.65

Prices without Saw

No. 1002A	For 4-inch Saw	18½ lbs.	26 lbs.	ZIRNA	$18.20
No. 1003A	For 5-inch Saw	20 lbs.	27½ lbs.	ZIROR	22.60
No. 1004A	For 6-inch Saw	21½ lbs.	32 lbs.	ZIRPE	27.80

Packed one in a wooden box.

Nos. 1100 to 1124A Mitre Boxes



These all-metal boxes with many improved features so thoroughly cover the field of both the new Langdon Improved and new Langdon boxes that the latter have been discontinued.

A solid, well made box with bed and back cast in one solid piece with the two working faces machined at right angles to one another. Legs are securely fixed to the bed by heavy screws, making a fine rigid set up.

The swinging lever or saw carriage is very substantially constructed of steel and is hung to the bed by means of a heavy king-pin. It swings freely from 45 to 90 degrees right or left and locks automatically at all the most used angles. A compression lock controlled by the pull rod at the side locks it at all intermediate angles.

The high-grade saws furnished run in long steel saw guides. Two spring locks in the guide posts hold the saw elevated when not in use. A slight downward pressure releases it. Depth gauges are provided to regulate the depth of cut.

Frame, legs and swinging lever nicely finished in red and black enamel. Other exposed metal parts nicely polished or nickeled.

Capacity—No. 1118—7⅝ inches at right angles, 5¾ inches at mitre.
Capacity—No. 1124A—10½ inches at right angles, 7¼ inches at mitre.

Prices Complete with Saw

	Size Saw	Net Weight	Packed	Code	Price Each
No. 1118	18 x 4 inches	19 lbs.	25 lbs.	ZUHNA	$15.40
No. 1124A	24 x 4 inches	20 lbs.	28½ lbs.	ZUHOR	19.40

No. 1100	For 18 x 4 inch Saw	16¾ lbs.	23 lbs.	ZUHEP	$12.40
No. 1101	For 24 x 4 inch Saw	22 lbs.	25½ lbs.	ZUHMO	13.65

Packed one in a wooden box.

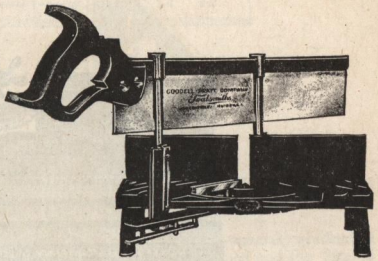
No. 1625 Mitre Box

A light, easily portable box of excellent design. The iron bed and back are one piece, with both faces machined at right angles to one another. The legs are demountable.

The saw carriage is steel throughout, has a very substantial pivot pin on which it swings freely from 45 to 90 degrees right or left. It locks automatically at the most used angles right and left.

The high-grade saw furnished has a blade 2½ inches deep and 16 inches long and runs in long steel guides, assuring accuracy of the vertical cut as well as the angular.

Gauges are provided to regulate the depth of the cut.



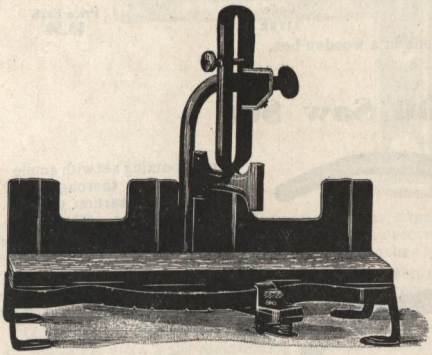
The steel guides, depth gauges, and gib are white nickeled. The bed, back, and legs are finished in red and black enamel.

Capacity at right angles, 5⅛ inches; at mitre, 3½ inches.

	Size Saw	Net Weight	Packed	Code	Price Each
No. 1625	16 x 2½ inches	7¼ lbs.	11 lbs.	ZUJPA	$12.60

Packed one in a wooden box.

No. 110 Mitre Box



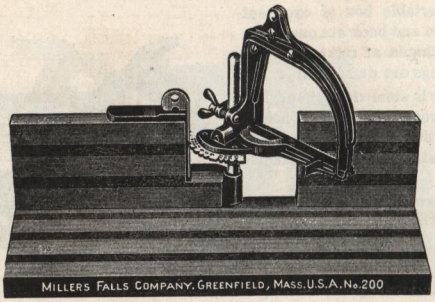
The open front type of box is built to meet the demand for a practical box at a low price. It is made entirely of steel with few parts and quick, easy adjustments. The frame and legs are one piece. The saw guide is adjustable for any size back or panel saw with device for squaring with bases and back. Swivel arm locks positively at most used angles and clamps rigidly for intermediate angles. A roll is provided to prevent the saw marring the bottom board. No saw furnished.

Frame black enameled, saw guides red. Nickel trimmings.

	Weight	Code	Price Each
No. 110	9 lbs.	LESTA	$7.35

Packed one in a wooden box.

No. 200 Mitre Box



The frame of this box is made of laminated wood doweled for strength. The saw guide is designed so that either a back or panel saw may be used.

The saw guide is mounted on a steel post and can be adjusted freely for various angles and heights. It is provided with three screws for adjustment to the thickness of the saw blade used.

A steel index plate, indexed and clearly marked for the six commonly used angles, 0, 9, 22½, 30, 36 and 45 degrees, right or left, is fixed to the saw guide. To set the guide at any one of these angles the steel slide key in the frame of the box is lifted and the guide swung until the proper notch in the index plate is opposite the key. The key is then pushed down until it seats firmly in the notch.

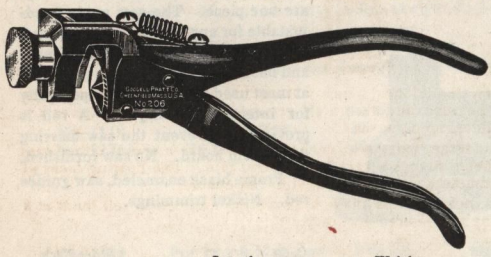
Any intermediate angles can be obtained by using the thumb screw at the back of the saw guide. This thumb screw is also used for setting the guide at any desired height.

When a back saw is used exact depths can be sawed by raising the saw guide on its post to the proper height so that the shoulders provided prevent the saw going below the desired point.

	Weight	Code	Price Each
No. 200	6 lbs.	LITER	$3.50

Packed one in a wooden box.

No. 206 Saw Set



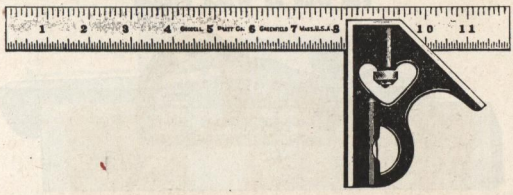
A quick-acting set with ample power to do a thorough job without undue exertion on the part of the operator. The frame and handles are malleable iron, finished in red and black enamel. The jaws and anvil are tempered steel, well polished.

It is readily adjusted, making a thoroughly efficient tool.

	Length	Weight	Code	Price Each
No. 206	6¾ inches	9 ozs.	YEMYP	$2.00

Packed one in a box.

No. 35 Carpenters' Combination Square



An accurate, nicely finished square, made especially for the carpenter. It takes the place of a whole set of ordinary try squares. It is a mitre square, a depth gauge, a level, a marking gauge and many other tools all in one.

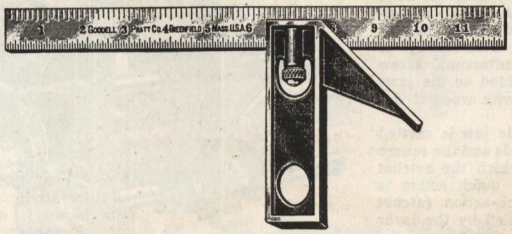
The well-finished steel blades are 12 inches long and 1 inch wide and are accurately graduated in 8ths, 16ths, 32nds and 64ths of an inch. The graduations are sharply *etched* and the figures are large and clear.

The beam has accurately milled working faces, the edges are polished, and the web is finished in black enamel. A spirit glass is accurately set in the body which can be used as a level or plumb. The beam can be slipped along the scale and locked at any point by means of the lock nut provided.

	Blade	Weight	Code	Price Each
No. 35	12 inches	¾ lb.	YACZO	$1.80

Packed one in a box.

Carpenters' Combination Squares



These squares have 12-inch heavy steel blades, 1 inch wide, graduated on both sides in 8ths and 16ths by our improved dividing engines, and accurately ground to length. The figures are large and clear, and the graduation lines deeply etched.

The beams of improved shape are large, being 4¾ inches long, and are made of either cast iron or aluminum. The aluminum beam makes a very light weight tool. The bearing faces of the beams are machined, and the remaining portions finished in red enamel.

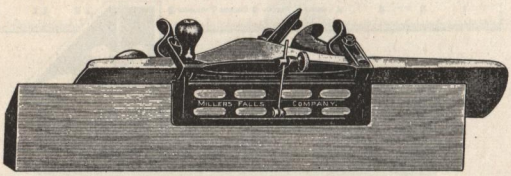
As there are no levels or scribers included with these tools we are enabled to sell them at a very moderate price while maintaining the desired accuracy.

		Weight	Code	Price Each
No. 707	Iron Beam	15 ozs.	ZAPEC	$1.00
No. 807	Aluminum Beam	7 ozs.	ZEIFY	1.10

Packed one in a box.

No. 88 Jointer Gauge

For Iron or Wood Planes



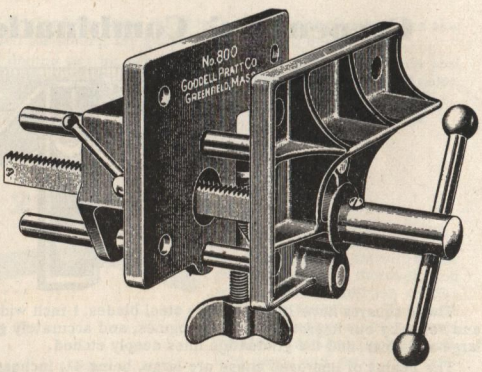
Easily and quickly attached to iron or wood planes by means of the adjustable cams; to wood planes by ordinary wood screws. Can be used on either side of plane, for right or left hand work.

Finished in black enamel. Flat bearing surface polished and nickel plated.

	Length	Weight	Code	Price Each
No. 88	9 inches	2¼ lbs.	LITRA	$2.35

Packed one in a box.

No. 800 Carpenters' Vise



This new, quick-acting carpenters' vise is built to clamp to the corner of any bench or table up to 1⅞ inch thick and its malleable iron jaws are designed for holding work horizontally or vertically. Countersunk screw holes are provided so the jaws can be faced with wood if desired.

The movable jaw is carried on twin steel rods and the square steel rod in which the ratchet controlling the quick action is cut. The quick-action ratchet pawl is controlled by the lever just back of the fixed jaw at the left.

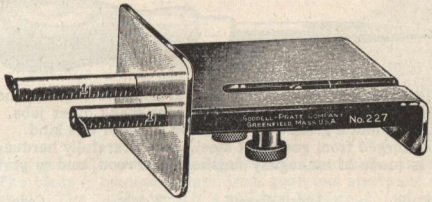
To tighten work in the vise place the piece to be held between the jaws and push the movable jaw in as far as possible and then tighten by giving a quarter or half turn on the clamp handle. To release, unscrew the clamp handle a quarter or half turn, then raise the quick action lever at the left and pull the movable jaw out.

Jaw castings are finished in red and black enamel.

	Jaw Faces	Jaws Open	Length	Weight	Price Each
No. 800	5½ x 4 inches	3½ inches	8½ inches	5 lbs.	$2.75

Packed one in a box.

No. 227 Combination Butt Gauge



This tool is designed especially for door hanging and mortise work. It is provided with three hardened double edge spurs, the one on the back of the double end bar being adjustable for the regulation of clearance.

The tool is well made, entirely of steel, and is polished and nickel plated.

	Length	Weight	Code	Price Each
No. 227	3½ inches	8 ozs.	YETRE	$1.60

Packed one in a box.

Carpenters' Plumb Bobs

These plumb bobs are machine turned from cold rolled steel. The points are sharpened and hardened; the round surfaces smoothly finished. Hang true and insure positive accuracy in plumbing and leveling.

	Length	Weight	Code	Price Each
No. 1	2¾ inches	3 ozs.	LLOYD	$0.30
No. 2	3½ inches	6 ozs.	LOACH	.35
No. 3	4 inches	9 ozs.	LIVER	.55
No. 4	5 inches	14 ozs.	LOANY	.70

Packed six in a box.

No. 56 Bench Hook

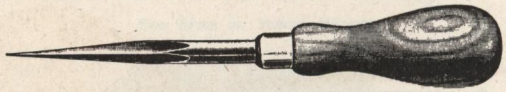
A strong, rigid tool easily inserted in any bench. Has four faces, adjustable to any desired position and height by means of set screw in center. Upper part of socket 2 inches and lower part 1 inch in diameter.

Steel hook, nickeled. Inner surface of socket enameled red. Edge of socket polished.

	Weight	Code	Price Each
No. 56	10 ozs.	LIVID	$1.20

Packed six in a box.

No. 346 Hand Reamer



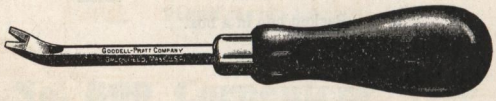
This is a very fine little tool for removing the burr around the edge of a hole, increasing the diameter of small holes in wood and soft metals, and for many other jobs. Every gunsmith, assembler, or repairman will find a great deal of use for a tool of this kind.

The blade is hammer-forged from good tool steel, and is carefully hardened, tempered, and polished. The handle is made of mahogany finished hardwood, and is protected by a heavy ferrule.

	Blade	Length Overall	Weight	Code	Price per Dozen
No. 346	3 inches	6¼ inches	2 ozs.	YISYO	$4.80

Packed six in a box.

No. 583 Tack Claw



This is a practical and serviceable tool for pulling all sizes of tacks. The blade is forged from a high grade of 5/16-inch steel, hardened, tempered, and polished. The handle is hardwood, nicely polished.

	Length Overall	Weight	Code	Price Each
No. 583	7 inches	3 ozs.	YUNGY	$0.50

Packed six in a box.

Nos. 798 and 799 Piercing Awls

No. 798

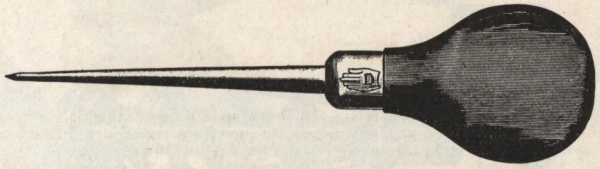
No. 799

For piercing thin sheets of soft metals and other materials and for a great variety of uses where a slim, keen-pointed blade is required. The blades are 2½ inches long and made of tool steel carefully tempered and nicely polished. The handles are made of hardwood with an attractive lacquer finish.

	Blade	Length Overall	Weight	Code	Price per Dozen
No. 798	2½ inches	4⅛ inches	½ oz.	ZEGOB	$3.60
No. 799	2½ inches	6⅛ inches	¾ oz.	ZEGUC	3.60

Packed twelve in a box.

No. 335 Ship Carpenters' Awl

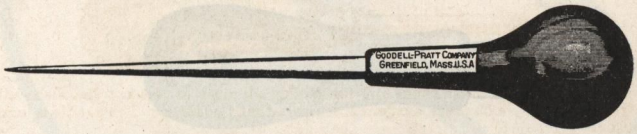


A short, stocky awl generally used by bridge builders and ship carpenters. It is a strong, serviceable tool. The blade is hammer-forged from good tool steel, and is carefully hardened, tempered, and polished. The handle, which is polished hardwood, mahogany finish, 1¼ inches in diameter, is protected by a heavy ferrule.

	Blade	Length Overall	Weight	Code	Price per Dozen
No. 335	2½ inches	5 inches	1 oz.	YIRSA	$3.30

Packed twelve in a box.

No. 344 Scratch Awl

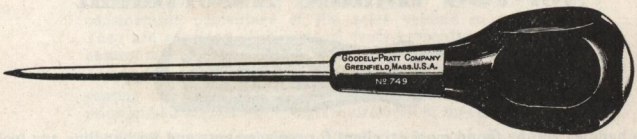


This is an exceptionally well made and nicely balanced awl. The blade is hammer-forged tool steel, carefully hardened, tempered, and polished. The handle is hardwood, mahogany finish, 1½ inches in diameter, protected by a heavy steel ferrule.

	Blade	Length Overall	Weight	Code	Price per Dozen
No. 344	4 inches	7 inches	2 ozs.	YISUZ	$5.00

Packed six in a box.

No. 749 Scratch Awl



This fine awl is provided with a flush steel head that is locked on to the hammer-forged tool steel blade, which is carefully hardened, tempered, and polished. The handle is hardwood, mahogany finish, protected by a heavy steel ferrule, and having five flat faces that give an exceptional grip and also prevent rolling.

	Blade	Length Overall	Weight	Code	Price Each
No. 749	4¼ inches	8⅛ inches	4 ozs.	ZAWIL	$0.70

Packed six in a box.

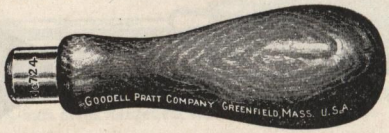
No. 448 File Handle

While this handle holds perfectly files with tangs of all sizes and shapes, and is primarily a file handle, yet it also holds a variety of shanks of different shapes and sizes which do not exceed ⅜ inch square or flat. Malleable iron handle, black enameled. Screw and yoke white nickeled.

	Length	Weight	Code	Price Each
No. 448	5¼ inches	5 ozs.	SCAMP	$0.30

Packed six in a box.

No. 724 File Handle Assortment



These handles are made of thoroughly seasoned hardwood with polished mahogany finish. The shape is a most comfortable one in use. The polished nickeled ferrule is amply heavy to allow firm seating of the file tang without danger of splitting. The assortment consists of twelve handles made up of five different sizes from 3 inches to 4¾ inches in length.

	Weight	Code	Price per Dozen
No. 724	1¼ lbs.	ZASUK	$1.45

Packed twelve assorted sizes in a box.

No. 726 Handle Assortment

These handles will be found most excellent for replacements and for handling any tool with a round shank within their capacity. They are made of thoroughly seasoned hardwood with a highly polished mahogany finish fluted to give a sure grip. This is the same handle used on our No. 909 Screw Driver and the assortment is made up of twelve handles as used on the 2, 4, 5, 6, and 8 inch sizes.

	Weight	Code	Price per Dozen
No. 726	1¼ lbs.	ZATAG	$2.40

Packed twelve assorted sizes in a box.

AUTOMATIC TOOLS

Automatic Drills and Automatic Screw Drivers represent a considerable percentage of the sales volume in quality tools. They are accepted equipment of every carpenter, cabinet maker, pattern maker, model maker and home craftsman.

The five automatic drills shown on the following pages, representing the active line, give a broad assortment of styles and a price spread that covers every requirement in this field.

Three sizes of Automatic Screw Drivers in both regular and quick return action patterns, with a time tested operating mechanism, cover every demand for a tool of this description.

Each tool in this line represents perfection as nearly as it is possible to attain it commercially. It doesn't seem possible to make them any better. Their beautiful finish and exceptional performance have made hundreds of thousands of purchasers enthusiastic owners.

GREENFIELD, MASSACHUSETTS

No. 81 Automatic Drill

The magazine handle of this well-known drill makes selection and removal of drill points extremely easy. By loosening the knurled lock nut below, the entire handle drops down, exposing all eight drill points. Each drill point is in a separate numbered compartment. The diameter of each drill also appears.

Drill points of new pattern seat and lock positively in the chuck when the knurled chuck nut is tightened.

Sturdy, smooth-operating mechanism. The center or spiral nut, which takes most of the wear, is made of Tobin bronze and with proper lubrication is good for many years' service.

Eight drill points, 1/16 to 11/64 inch in diameter, supplied with each drill.

Entire tool beautifully polished, nickeled and buffed.

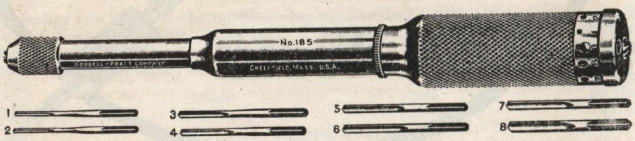
	Length	Weight	Code	Price Each
No. 81	10½ inches	9 ozs.	DELSA	$2.80

Packed one in a box.

No. 185 Automatic Drill

Registered U. S. Patent Office as

Mr. Punch



A world famous drill that embodies every feature desirable in a tool of this kind. The operating mechanism is sturdy, smooth acting and long lived.

The front portion of the tool is made of hollow brass tubes, on one of which a carefully machined spiral is cut. This runs through a spiral cut in the center nut, which is made of a very hard grade of bronze.

The finely knurled handle is of the magazine type, having individual compartments for the eight different size drill points. Each one of these compartments is numbered and below the number is a hole or gauge showing the size of hole drilled by the point in that compartment. Drill points are removed or returned by turning the hole in the rotating cap opposite the proper compartment and tipping out the point. Only one compartment opens at a time.

The chuck has two hardened steel jaws which clamp down tightly on the fluted shanks of the drill points, making it impossible for them to slip or pull out.

Eight fluted shank drill points, 1/16 to 11/64 inch in diameter, regular equipment.

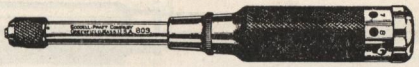
Entire tool finely polished, nickel plated and highly buffed.

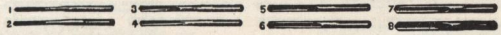
	Length	Weight	Code	Price Each
No. 185	10 inches	½ lb.	YEKIJ	$2.50

Packed one in a box.

No. 809 Automatic Drill

Mr. Punch Junior





This drill is only 7½ inches long, making it very easy to use in cramped places. It is also short enough to fit the pocket.

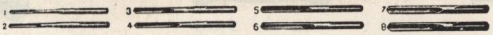
It bores holes just as rapidly as the longer models. Eight drill points, 1/16 to 11/64 inch in diameter, are held in separate numbered compartments in the patented magazine handle from which they are released one at a time through a hole in the rotating cap. A drill point gauge shows the size hole bored by the drill in each compartment. All exposed metal parts nicely polished, nickel plated, and highly buffed.

Eight fluted drill points, 1/16 to 11/64 inch in diameter, furnished.

	Length	Weight	Code	Price Each
No. 809	7½ inches	½ lb.	ZEILF	$2.00

Packed one in a box.

No. 188 Automatic Drill



This new tool is built for the home, to provide a highly efficient drill at a very reasonable price, that any man, woman, or child can use to bore the many holes needed from time to time, for installing the many modern fixtures that go into every room in the house, and innumerable other uses.

It drills eight different size holes quickly, and with surprising ease, in hard and soft wood, soft metals, wall board, plaster, etc. The eight drill points are contained in the numbered compartments in the magazine handle. They are safely locked in until wanted.

To remove the size drill wanted, release the cap lock by slipping down the lock button, turn the hole in the cap opposite the proper drill compartment and tip out the drill.

Insert the drill selected in the four-jawed chuck, tighten the chuck nut and the tool is ready to use. Place the drill point where the hole is wanted and simply push down a few times, allowing the handle to spring back after each stroke, and there is a good clean hole.

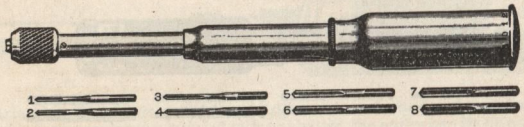
The handle is jet black molded bakelite with a polished aluminium band just below the rotating cap. The exposed metal parts are beautifully polished and nickel plated. The spiral driving mechanism is very well made and is practically indestructible with proper lubrication.

Eight fluted shank drill points, 1/16 inch to 11/64 inch in diameter, are furnished with each drill.

	Length	Weight	Code	Price Each
No. 188	9⅝ inches	6 oz.	YEKNA	$1.70

Packed one in a box.

No. 03 Automatic Drill



This tool has exactly the same mechanical construction as the other Goodell-Pratt drills, the only difference being that the brass tubing of which they are made is not polished. They are finished in white nickel, which affords a considerable saving in cost without detracting in any way from the efficiency of the tool.

Patented brass magazine handle with eight numbered compartments, each holding a drill point. Drill points removed through hole in the rotating cap. Dull nickel finish.

Eight fluted shank drill points, 1/16 to 11/64 inch in diameter, regular equipment.

	Length	Weight	Code	Price Each
No. 03	9¾ inches	9 ozs.	WYDFE	$2.00

Packed one in a box.

No. 101 Reciprocating Drill

This tool is designed for rapid drilling in iron, brass, or wood, as well as for use in places where a bit brace or breast drill cannot be used.

The traveling handle contains the flanges and hard bronze nuts which constitute the simple and durable driving mechanism, which causes the chuck to revolve continuously to the right when the traveling handle is moved either forward or backward.

Both the head and traveling handle are made of selected hardwood with a fine mahogany lacquer finish.

The head has a heavy steel quill running on ball bearings. The polished steel spiral, 12½ inches long, is accurately cut to a 17½ degree angle, giving ample power.

The chuck is all steel, with three hardened jaws holding round shank drills 0 to ¼ inch in diameter.

No drills furnished with this tool.

	Length	Weight	Code	Price Each
No. 101	16½ inches	15 ozs.	YAWUS	$3.00

Packed one in a box.

Fluted Shank Drill Points

For Use in all Goodell-Pratt Automatic Drills

No.	App. Size	No.	App. Size
1	1/16	5	1/8
2	5/64	6	9/64
3	3/32	7	5/32
4	7/64	8	11/64

These drill points have fluted shanks for use in the two-jawed chucks of automatic drills. They are manufactured from the finest grade of tool steel, are very carefully hardened and oil tempered.

The straight flutes are very desirable for drilling wood or soft metals.

Length overall, about 2 inches.

	Length	Code	
Price, per dozen	2 inches	ZOTOZ	$1.05
Price, per set of 8	2 inches	ZOTPA	.75

Packed one dozen or one set in an envelope.

Round Shank Drill Points

For Use in Three-Jawed Chucks

No.	App. Size	No.	App. Size
1	1/16	5	1/8
2	5/64	6	9/64
3	3/32	7	5/32
4	7/64	8	11/64

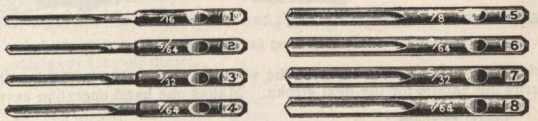
Same as the above, but with plain round shanks that can be held in any three-jawed chuck of sufficient capacity.

	Length	Code	
Price, per dozen	2 inches	ZOTUB	$0.50
Price, per set of 8	2 inches	ZOTVA	.35

Packed one dozen or one set in a wooden box.

New Style Drill Points

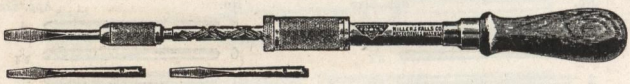
For Use in Millers Falls and Some Other Makes of Automatic Drills



	Length	Code	
Price, per dozen	2 inches	DETOR	$1.05
Price, per set of 8	2 inches	DETOT	.75

Packed one dozen or one set in a wooden box.

Spiral Ratchet Screw Drivers



The smooth, powerful action and tested dependability of its vital operating mechanism make this the finest screw driver of its kind ever produced.

It automatically drives or draws screws, acts as a left or right hand ratchet or as a rigid screw driver. These actions are all controlled by simple shifting of the knurled control sleeve and the spiral lock nut.

The spiral is a solid rod of fine quality steel, precisely machined, running in two manganese bronze spiral nuts controlled by hardened tool steel ratchet pawls. The length of the spiral nuts has been nearly doubled, greatly increasing the life of these vital parts.

Three sizes of special analysis steel blades, individually tested, are furnished as regular equipment. They are quickly installed by drawing down the shell of the quick-acting chuck, inserting the shank and turning it to the right as far as possible and then releasing the chuck shell.

All exposed metal parts finely polished, nickel plated and buffed. Mahogany finished hardwood handle.

	Length Extended with Bit Inserted	Length Closed	Weight	Code	Price Each
No. 67	12⅝ inches	9⅜ inches	9½ ozs.	GAILY	$2.40
No. 61	20½ inches	14¼ inches	18½ ozs.	GALAX	3.20
No. 62	26¼ inches	17¼ inches	1½ lbs.	GABE	4.30

Packed one in a box.

Spiral Ratchet Screw Drivers

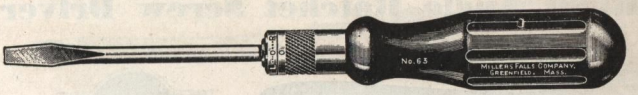
With Automatic Return

Same design and action as above, with the addition of a spring in the handle which automatically returns the handle for the next stroke. Makes one hand operation easy.

	Length Extended with Bit Inserted	Length Closed	Weight	Code	Price Each
No. 670	13⅛ inches	8⅛ inches	¾ lb.	GALEA	$2.85
No. 610	20½ inches	12⅝ inches	1¼ lbs.	GALIO	3.65
No. 620	26¾ inches	16⅛ inches	1⅞ lbs.	GALOP	4.95

Packed one in a box.

No. 63 Ratchet Screw Drivers



Years of dependable service in the hands of innumerable owners have proven the merit of the smooth, quiet ratchet mechanism used in this screw driver.

The ratchet is controlled by means of the knurled shifter sleeve. Three settings give right hand ratchet, left hand ratchet and rigid respectively.

The blade is forged from the highest quality screw-driver steel. Ratchet frame is steel with hardened tool steel ratchet pawls and spring steel springs.

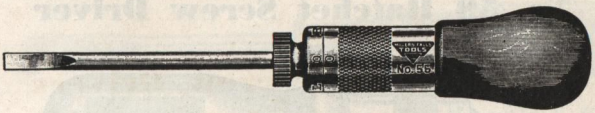
Handles are nicely mahogany finished hardwood.

Exposed metal parts polished and nickel plated.

	Length Blade	Weight	Code	Price Each
No. 63	2 inches	3 ozs.	GANGA	$0.55
No. 63	3 inches	4 ozs.	GANIL	.70
No. 63	4 inches	5 ozs.	GAPER	.75
No. 63	5 inches	6 ozs.	GARRY	.80
No. 63	6 inches	8 ozs.	GARTH	.95
No. 63	8 inches	9 ozs.	GARUM	1.05

Packed six in a box.

No. 55 Ratchet Screw Drivers



Particularly adapted for radio, electrical and other light work where small screws are used.

It is equipped with the same ratchet mechanism as No. 63 above, but with a cabinet type blade with a knurled collar at the handle end which can be rotated rapidly between the thumb and finger.

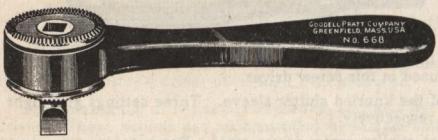
Three actions: Right and left hand ratchet and rigid.

Blade nicely polished, all other exposed metal parts polished and nickel plated. Hardwood handle has nice mahogany lacquer finish.

	Length Blade	Weight	Code	Price Each
No. 55	2 inches	3 ozs.	GATCH	$0.65
No. 55	3 inches	3 ozs.	GATER	.70
No. 55	4 inches	3 ozs.	GATHA	.75
No. 55	5 inches	4 ozs.	GACUY	.75
No. 55	6 inches	4 ozs.	GAUDY	.75

Packed six in a box.

No. 668
Right Angle Ratchet Screw Driver

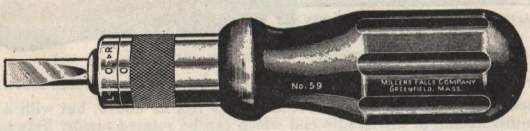


A unique tool that operates rapidly in innumerable places inaccessible to the ordinary screw driver. Sturdy right and left hand ratchet action obtained by shifting blade to one side or the other. New blade retainer makes shifting easy. Bit ¼ inch wide. All exposed steel parts nicely polished. Handle and head finished in red and black lacquer.

	Length Overall	Weight	Code	Price Each
No. 668	4 inches	3 ozs.	ZAHUX	$1.00

Packed one in a box. Six boxes in a counter display carton.

No. 59 Ratchet Screw Driver



Exactly the same mechanism as the heavy sizes of No. 63, with a short, stocky blade and handle for use by gunsmiths, locksmiths, electricians, mechanics and others who need a heavy duty ratchet driver.

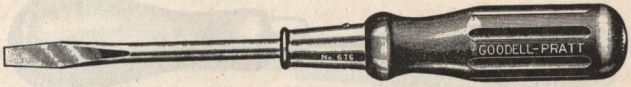
Three actions: Right and left hand ratchet and rigid.

Exposed metal parts polished and nickel plated. Handle mahogany lacquered hardwood.

	Length Blade	Length Overall	Weight	Code	Price Each
No. 59	1⅛ inches	6¼ inches	6 ozs.	GAWBY	$0.80

Packed six in a box.

No. 676 Steel Head Screw Drivers



An extra fine quality screw driver with a steel head set into the end of the handle and everlastingly locked directly to the shank of the blade. The more hammering on the head, the tighter this lock becomes.

The blades are hammer-forged from a fine quality of tool steel selected for its remarkable toughness when properly heat-treated. The shanks have long, wide wings forged on them that preclude any chance of turning in the handle. The handles, of excellent shape and fluted to give a good grip, are made of selected hardwood with a fine mahogany lacquer finish. The handle is protected by a heavy steel ferrule pinned through the blade.

The blades are highly polished and the steel head and ferrule nickel plated.

	Length Blade	Diameter Blade	Weight Box	Code	Price per Dozen
No. 676	3 inches	7/32 inch	1¼ lbs.	ZAJUZ	$4.50
No. 676	4 inches	9/32 inch	1¾ lbs.	ZAJVE	5.00
No. 676	5 inches	5/16 inch	2½ lbs.	ZAJYO	5.50
No. 676	6 inches	5/16 inch	2⅝ lbs.	ZAKAV	6.00
No. 676	8 inches	3/8 inch	4 lbs.	ZAKIX	8.00
No. 676	10 inches	3/8 inch	4½ lbs.	ZAKOZ	10.00
No. 676	12 inches	3/8 inch	5 lbs.	ZAKUB	11.00

Packed six in a box.

No. 909 Screw Driver

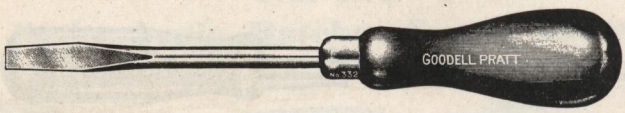
The same fine screw driver described above but without the steel head. No finer general purpose screw driver can be made.

Finely polished tool steel blade. Pinned nickel-plated ferrule and mahogany lacquered hardwood handle.

	Length Blade	Diameter Blade	Weight Box	Code	Price per Dozen
No. 909	2 inches	7/32 inch	¾ lb.	ZIASP	$2.95
No. 909	3 inches	7/32 inch	⅞ lb.	ZIAWS	3.15
No. 909	4 inches	9/32 inch	1⅜ lbs.	ZIAXT	3.40
No. 909	5 inches	5/16 inch	1⅞ lbs.	ZIBBO	3.80
No. 909	6 inches	5/16 inch	2 lbs.	ZIBIZ	4.15
No. 909	8 inches	3/8 inch	3¼ lbs.	ZIBUC	5.50
No. 909	10 inches	3/8 inch	3¾ lbs.	ZIBWA	6.40
No. 909	12 inches	3/8 inch	4⅛ lbs.	ZIBYE	7.40
No. 909	14 inches	3/8 inch	4⅜ lbs.	ZICAY	9.20
No. 909	16 inches	3/8 inch	5 lbs.	ZICCO	11.00
No. 909	18 inches	3/8 inch	5½ lbs.	ZICEZ	12.40

Packed six in a box.

No. 332 Screw Driver



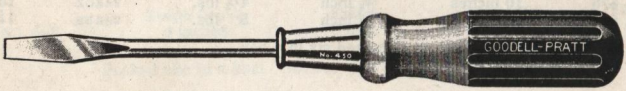
A fine quality driver designed for those who prefer a smooth, round handle. Hammer-forged blade of high grade steel, carefully hardened and heat-treated and beautifully polished.

Handle turned from selected hardwood and nicely finished in mahogany lacquer. Nickel-plated steel ferrule.

	Length Blade	Diameter Blade	Weight Box	Code	Price per Dozen
No. 332	1½ inches	7/32 inch	½ lb.	YIONS	$3.30
No. 332	2 inches	7/32 inch	⅝ lb.	YIOPT	3.40
No. 332	3 inches	9/32 inch	⅞ lb.	YIOSY	3.60
No. 332	4 inches	9/32 inch	1⅛ lbs.	YIOVB	4.00
No. 332	5 inches	5/16 inch	1½ lbs.	YIOXD	4.40
No. 332	6 inches	5/16 inch	1⅞ lbs.	YIPER	4.80
No. 332	8 inches	⅜ inch	2¼ lbs.	YIPTO	5.80

Packed six in a box.

No. 450 Household Screw Driver

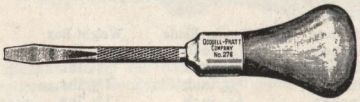


A well-built screw driver that represents a big value. The blade is forged from a good grade of steel, hardened, tempered and polished. The handle is attractively finished in red and black lacquer and is protected by a heavy nickel-plated ferrule securely pinned on.

	Length Blade	Diameter Blade	Weight Box	Code	Price per Dozen
No. 450	3 inches	7/32 inch	⅞ lb.	YIPXA	$2.40
No. 450	4 inches	¼ inch	1⅜ lbs.	YIPYT	2.65

Packed six in a box.

No. 278 Pocket Screw Driver

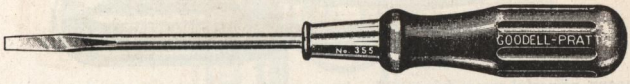


This extremely popular little screw-driver has a mahogany lacquer-finished hardwood handle, a nickel-plated ferrule and a high grade nickeled tool steel blade, carefully tempered. The blade is knurled for convenience in rapid rotation and will drive or draw surprisingly large screws. It is a useful article in any tool box, in any office desk, or in any home.

	Length Blade	Diameter Blade	Weight Box	Code	Price per Dozen
No. 278	1⅝ inches	5/32 inch	½ lb.	YIDUK	$2.00
No. 278	3 inches	5/32 inch	⅝ lb.	YIDUM	2.20

Packed one dozen in a box.

No. 355 Cabinet Screw Driver



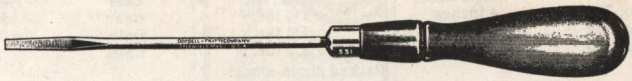
Manufactured from the best materials obtainable for the purpose and finished in keeping. The blades are hammer-forged from a high grade tool steel, carefully hardened and oil tempered and nicely polished.

The handles are made of hardwood, fluted to give a good grip and nicely finished in mahogany lacquer. Handles are protected by heavy steel ferrules, securely pinned on.

	Length Blade	Diameter Blade	Weight Box	Code	Price per Dozen
No. 355	2½ inches	7/32 inch	7/8 lb.	YIWAY	$3.40
No. 355	3½ inches	7/32 inch	7/8 lb.	YIWEZ	3.60
No. 355	4½ inches	7/32 inch	1 lb.	YIWIB	3.80
No. 355	5½ inches	7/32 inch	1 lb.	YIWOC	4.30
No. 355	6½ inches	7/32 inch	1⅛ lbs.	YIWUD	4.80
No. 355	8½ inches	7/32 inch	1¼ lbs.	YIZAB	5.80
No. 355	9½ inches	7/32 inch	1¼ lbs.	YIZBA	6.50
No. 355	10½ inches	7/32 inch	1½ lbs.	YIZCE	7.00
No. 355	12½ inches	7/32 inch	1½ lbs.	YIZEC	8.20

Packed six in a box.

No. 331 Jewelers' Screw Driver



A slim, light screw driver of the best quality suitable for the most delicate work. The blades are hammer-forged from the best quality tool steel, carefully hardened and tempered.

The handles are hardwood with a fine mahogany lacquer finish. They are protected with a nickel-plated steel ferrule.

	Length Blade	Diameter Blade	Weight Box	Code	Price per Dozen
No. 331	2 inches	9/64 inch	3/8 lb.	YINPA	$3.30
No. 331	3 inches	9/64 inch	3/8 lb.	YINSO	3.60
No. 331	4 inches	9/64 inch	½ lb.	YINUT	4.00
No. 331	5 inches	9/64 inch	½ lb.	YINYV	4.40
No. 331	6 inches	9/64 inch	5/8 lb.	YIOCH	4.80
No. 331	8 inches	9/64 inch	¾ lb.	YIOFK	5.80
No. 331	10 inches	9/64 inch	7/8 lb.	YIOHM	6.80
No. 331	12 inches	9/64 inch	1 lb.	YIOJN	8.20

Packed six in a box.

No. 367 Machinists' Screw Driver

A heavy, powerful screw driver with a hammer-forged blade made of a fine quality of ⅜-inch square alloy steel, hardened and tempered for extreme toughness for heavy duty service.

The blade is highly polished. The shank runs clear through the handle and is positively locked into a heavy steel head set flush with the end of the handle.

The heavy nickel-plated steel ferrule is pinned to the hardwood handle, which is of good size, well fluted and finished in black lacquer.

	Length Blade	Stock	Weight Box	Code	Price per Dozen
No. 367	2 inches	⅜ inch	2⅞ lbs.	YOARY	$7.20
No. 367	3 inches	⅜ inch	3⅛ lbs.	YOASZ	7.80
No. 367	4 inches	⅜ inch	3⅜ lbs.	YOAWD	8.40
No. 367	6 inches	⅜ inch	4 lbs.	YOAWO	9.60

Packed six in a box.

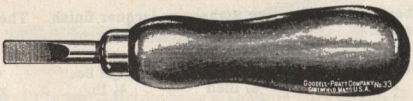
No. 330 Electricians' Screw Driver

Designed especially for electricians to protect the user from electric shocks. The blade, hammer-forged from the best tool steel, carefully hardened and tempered and nicely polished, is set in a hard rubber socket that is solidly set in the handle. A heavy nickel-plated ferrule protects the nicely mahogany lacquered hardwood handle. The handle is six sided, giving an unusually good grip.

	Length Blade	Weight Box	Code	Price Each
No. 330	4 inches	1¼ lbs.	YINAP	$0.70
No. 330	6 inches	1¾ lbs.	YINIR	.85
No. 330	8 inches	2 lbs.	YINOS	1.00

Packed six in a box.

No. 33 Gunsmiths' Screw Driver



Designed particularly for gunsmiths and locksmiths but nicely suited to many other classes of work. Blade milled from a fine quality of steel, properly hardened and tempered and solidly set in a well-finished mahogany lacquered hardwood handle protected by a nickel-plated ferrule. Blade nicely polished.

	Length Blade	Diameter Blade	Weight Box	Code	Price per Dozen
No. 33	1 inch	¼ inch	9 ozs.	YABRA	$4.40

Packed six in a box.

No. 300 Small Screw Drivers

These two attractive and useful little screw drivers have 1½ and 2½ inch white nickeled blades, nickeled ferrules, hardwood handles attractively finished in red and black lacquer. They are mounted on a silver card printed in red and black.

	Card Size	Weight Box	Code	Price per Card
No. 300	3½ x 5½ inches	1⅜ lbs.	YIGKA	$0.10

Packed two dozen cards in a box.

No. 100 Pocket Screw Driver

Just the driver for making adjustments and for general utility use. The mahogany lacquered hardwood handle is large enough to give a sure grip, yet small enough to be carried in the pocket without discomfort. Equipped with a fine tool steel blade, 1⅛ inches long, carefully hardened and tempered, and nicely polished. The ferrule is nickel plated.

Mounted on a gold card printed in red and black.

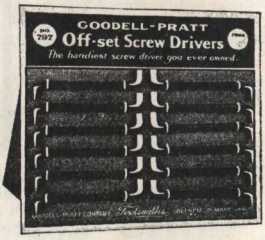
	Card Size	Weight Box	Code	Price Each
No. 100	3½ x 5½ inches	11 ozs.	YAWPO	$0.25

Packed six in a box.

Offset Screw Drivers

A wonderful tool for reaching out-of-the-way screws, starting frozen ones or wherever a lot of power is necessary. Forged from a fine grade of octagon steel, carefully hardened and tempered, with the bits nicely polished. Blades are set at right angles to one another, and on opposite sides of the handle. No. 797 can be supplied mounted one dozen on an attractive counter display card printed in three colors, which has stimulated the sale of this very useful tool many hundred per cent.

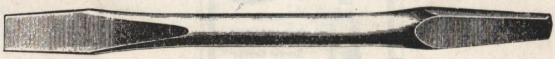
Made in two sizes, 4¼ inches and 8 inches.



	Length	Stock	Weight Box	Code	Price per Dozen
No. 797	4¼ inches	¼ inch	1¼ lbs.	ZEGMO	$3.60
No. 797	Mounted on counter display		1½ lbs.	ZEGIZ	3.60
No. 579	8 inches	⅜ inch	4 lbs.	YUNAZ	6.00

Packed one dozen in a box or one card in an envelope.

Screw-Driver Bits



An unexcelled line, hammer-forged from the best quality of steel procurable for the purpose. Carefully hardened, tempered and nicely polished.

Points carefully formed and accurately finished to fit the slots of the size screws for which they are intended.

Length, 5 inches overall.

	Size	Size Screws	Weight Doz.	Code	Price per Dozen
No. 351	4/16 inch	6 to 8	⅔ lb.	YIVOB	$2.90
No. 352	5/16 inch	8 to 12	¾ lb.	YIVUC	3.05
No. 353	6/16 inch	12 to 16	1 lb.	YIVWA	3.15
No. 552	7/16 inch	16 to 20	1¼ lbs.	YUHTE	3.20
No. 553	8/16 inch	20 to 24	1½ lbs.	YUHUX	3.25
No. 584	¼ to ⅜ Asst.	6 to 16	¾ lb.	YUNIC	3.05

Packed twelve in a box.

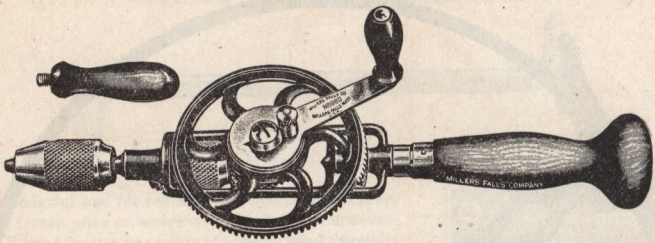
DRILLS

The pages immediately following illustrate and describe the world's most complete and finest line of Hand and Breast Drills. It represents the best items in both the Millers Falls and Goodell-Pratt lines, giving a complete range of chuck capacities, types of actions and speeds, styles of frames and handles. It is the logical line for the progressive dealer to concentrate on.

Electric Drills

Three very fine ¼-inch Drills in the Goodell-Pratt line are retained and shown in this catalog. The very complete Millers Falls Electric Tool line does not appear, being covered in a separate catalog which will be sent on request to anyone interested. Valuable distributorships, backed up by a sound merchandising policy and effective cooperation, are available in some sections.

No. 1980 Ratchet Hand Drill



Two Speed Ratchet Capacity 0 to ⅜ Inch

A finely developed and beautifully made two-speed drill with a powerful, smooth-acting ratchet mechanism.

The ratchet can be shifted instantly to left or right or eliminated entirely. Two speeds are provided, the ratios being 4 to 1 in high and 1½ to 1 in low, controlled by turning the knurled sleeve on the spindle. The chuck is the improved Millers Falls type with protected springs and capacity for 0 to ⅜ inch round shank drills. The fully enclosed steel pinions, large gear and compensating idler have machine-cut teeth. The spindle is equipped with a ball thrust bearing.

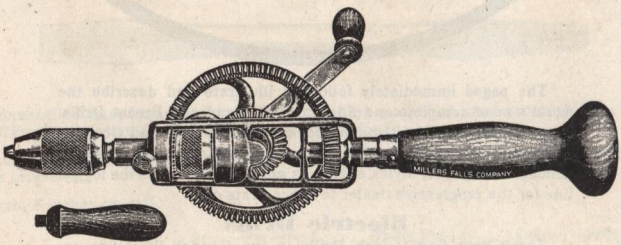
The solid end handle, crank and side handles are hardwood with a fine mahogany lacquer finish. The malleable iron frame is finished in glossy black enamel and large gear in an attractive red enamel.

All exposed metal parts are polished, nickeled and buffed.

	Capacity	Length	Weight	Code	Price Each
No. 1980	⅜ inch	15¾ inches	3¼ lbs.	DABAK	$6.65

Packed one in a box.

No. 980 Hand Drill



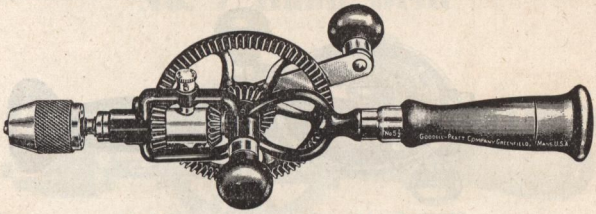
Two Speed Ratchet Capacity 0 to ⅜ Inch

Exactly the same as No. 1980 above, but without the ratchet mechanism.

	Capacity	Length	Weight	Code	Price Each
No. 980	⅜ inch	15¾ inches	3⅛ lbs.	DACEK	$5.40

Packed one in a box.

Nos. 5½ and 5½B Hand Drills



Two Speed Capacity 0 to ⅜ Inch

Known the world over for its smooth operation, years of serviceability and fine finish.

Equipped with an all-steel chuck for holding round shank drills up to ⅜ inch in diameter. Two speeds with ratios of 3.8 to 1 and 1.3 to 1, changed by turning the shifter knob. Ball bearing spindle. Steel pinions.

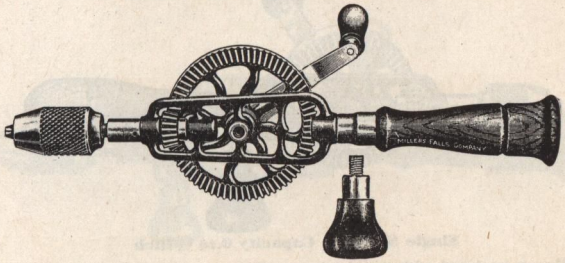
Black enameled malleable iron frame. Large gear red enameled. Hollow tropical hardwood end handle with screw cap. Side and crank handles mahogany finished hardwood. All exposed metal parts nicely polished, nickeled and buffed.

No. 5½B is exactly the same as No. 5½, but with solid mahogany finished hardwood end handle same as No. 980.

	Capacity	Length	Weight	Code	Price Each
No. 5½	⅜ inch	14½ inches	2½ lbs.	WYFUK	$5.40
No. 5½B	⅜ inch	15 inches	2½ lbs.	WYGAG	5.40

Packed one in a box.

No. 2 Hand Drill



Single Speed Capacity 0 to ⅜ Inch

A strong, serviceable tool built on a sturdy malleable iron frame. Three-jawed chuck with protected springs holds 0 to ⅜ inch round shanks. Gear ratio 4½ to 1. Spindle equipped with ball thrust bearing. Steel pinion. Adjustable rolling equalizer.

Frame nicely black enameled. Large gear red enameled with nickeled rim.

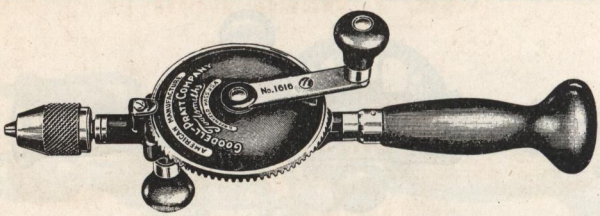
Exposed metal parts nickel plated and buffed. Tropical hardwood end handle with screw cap.

Eight drill points, 1/16 to 11/16 inch in diameter, regular equipment.

	Capacity	Length	Weight	Code	Price Each
No. 2	⅜ inch	14½ inches	2½ lbs.	DAGER	$4.80

Packed one in a box.

Nos. 1515 and 1616 Hand Drills



Single Speed Capacity 0 to ⅜ Inch

Built on an ebony enameled die cast frame that entirely encloses the steel pinion, giving the drill attractive, clean-cut lines. The large solid gear is finished in red enamel. Steel pinion. Cut gears. Gear ratio 4 to 1. Ball bearing spindle. Chuck has three hardened steel jaws that hold 0 to ⅜ inch round shanks.

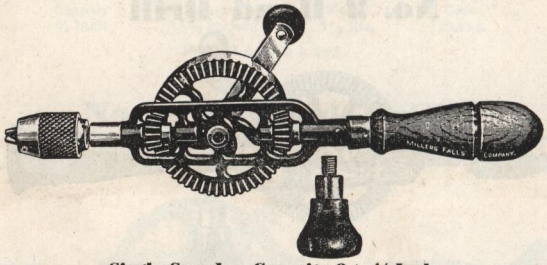
No. 1515 has hollow tropical hardwood end handle with screw cap. No. 1616 has a solid mahogany finished hardwood handle. Crank and side handles mahogany finished hardwood. Exposed steel parts nickel plated.

Eight drill points, 1/16 to 11/64 inch in diameter, regular equipment with No. 1515 only.

	Capacity	Length	Weight	Code	Price Each
No. 1515	⅜ inch	14½ inches	2¼ lbs.	ZOAST	$4.80
No. 1616	⅜ inch	15 inches	2¼ lbs.	ZOBUH	4.50

Packed one in a box.

Nos. 5 and 05 Hand Drills



Single Speed Capacity 0 to ¼ Inch

These drills are equipped with a wide rim on the large gear that can be grasped easily by the thumb and fingers to start small drills and on delicate work. Gear red enameled with polished and nickeled rim. Steel drive pinion and equalizing idler pinion. Three-jawed chuck with protected springs. Holds 0 to ¼ inch round shank drills. Black enameled malleable iron frame. All exposed metal parts nickel plated.

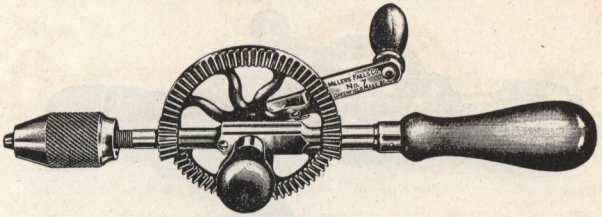
No. 5 has a hollow tropical hardwood end handle with screw cap and is regularly equipped with eight drill points, 1/16 to 11/64 inch in diameter.

No. 05 has a solid, mahogany finished hardwood end handle and has no drill points.

	Capacity	Length	Weight	Code	Price Each
No. 5	¼ inch	12⅞ inches	1⅝ lbs.	DANGL	$4.00
No. 05	¼ inch	12⅞ inches	1⅝ lbs.	DANKI	3.60

Packed one in a box.

No. 7 Hand Drill



Single Speed Capacity 0 to ⅜ Inch

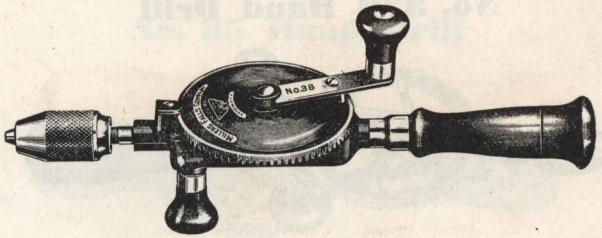
Built on a solid steel frame with steel drive and equalizing idler pinions. Large gear finished in red enamel with polished and nickeled rim. Three-jawed chuck with protected springs holds 0 to ⅜ inch round shank drills. End, side and crank handles mahogany finished hardwood.

Frame and all other exposed metal parts nicely polished and nickeled.

	Capacity	Length	Weight	Code	Price Each
No. 7	⅜ inch	13½ inches	1⅞ lbs.	DASHO	$3.90

Packed one in a box.

No. 38 Hand Drill



Single Speed Capacity 0 to ⅜ Inch

Similar to No. 1515, with die-cast frame, solid red enameled large gear and enclosed steel pinion. Chuck has three jaws with protected springs and holds 0 to ⅜ inch round shank drills.

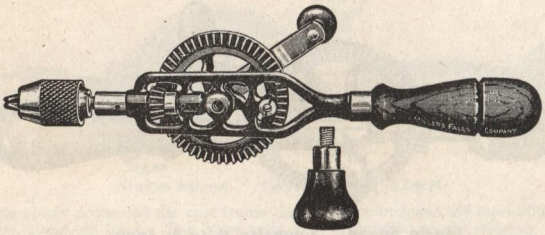
Side and crank handles mahogany lacquered hardwood. End handle hollow mahogany finished hardwood with a screw cap.

Exposed steel parts nickel plated.

	Capacity	Length	Weight	Code	Price Each
No. 38	⅜ inch	14⅞ inches	2¼ lbs.	DURRO	$3.15

Packed one in a box.

No. 1 Hand Drill



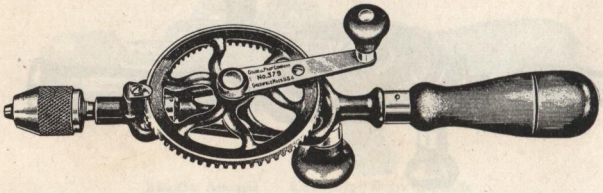
Single Speed Capacity 0 to ¼ Inch

A well-made drill with black enameled malleable frame. Hollow end handle with screw cap made of tropical hardwood. Nickeled steel chuck has three jaws with protected springs. Ball thrust bearing on spindle. Steel pinion. Large gear red enameled. Mahogany finished side and crank handles.

	Capacity	Length	Weight	Code	Price Each
No. 1	¼ inch	12½ inches	1¾ lbs.	DAFNE	$3.65

Packed one in a box.

No. 379 Hand Drill



Single Speed Capacity 0 to ¼ Inch

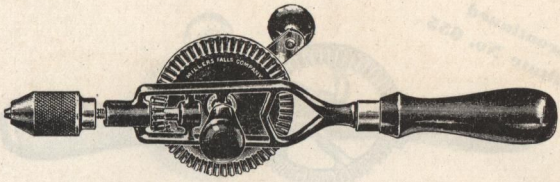
Built on a strong malleable iron frame finished in glossy black enamel, a hollow tropical hardwood end handle with screw cap and chuck with hardened steel jaws for holding 0 to ¼ inch round shank drills. Steel pinion. Large gear red enameled with nickeled rim. Side and crank handles mahogany finished hardwood. All exposed metal parts nickel plated.

Eight drill points, 1/16 to 11/64 inch in diameter, supplied with each drill.

	Capacity	Length	Weight	Code	Price Each
No. 379	¼ inch	12⅜ inches	1⅜ lbs.	YOCJA	$3.60

Packed one in a box.

No. 77 Hand Drill



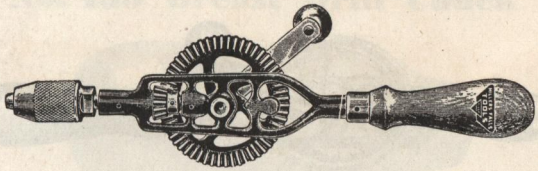
Single Speed Capacity 0 to ¼ Inch

A splendid value, but without some of the refinements of the higher priced lines. Black enameled malleable iron frame. Solid large gear finished in red enamel. Nickeled three-jawed steel chuck with protected springs holds 0 to ¼ inch round shank drills. Steel pinions. Handles solid, mahogany stained hardwood.

	Capacity	Length	Weight	Code	Price Each
No. 77	¼ inch	12½ inches	1⅜ lbs.	DETIG	$2.10

Packed one in a box.

No. 85 Hand Drill



Single Speed Capacity 0 to ¼ Inch

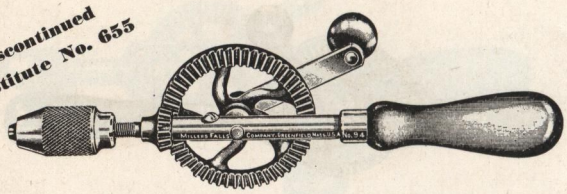
The black enameled frame on which this drill is built is malleable iron. The chuck has three jaws with protected springs and holds 0 to ¼ inch round shank drills. The crank and end handle are mahogany finished hardwood. Steel pinion. Ball thrust bearing on spindle. Large gear red enameled. Other metal parts nickeled.

	Capacity	Length	Weight	Code	Price Each
No. 85	¼ inch	12½ inches	1¾ lbs.	DALOT	$2.50

Packed one in a box.

No. 94 Hand Drill

Discontinued
Substitute No. 655



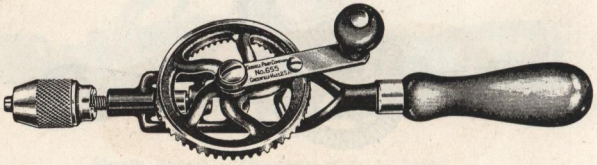
Single Speed Capacity 0 to ¼ Inch

A low priced drill with a nickel-plated, all-steel frame. Nickel-plated all-steel chuck holds 0 to ¼ inch round shank drills. End and crank handles mahogany stained hardwood. Large gear red enameled. Steel pinion.

	Capacity	Length	Weight	Code	Price Each
No. 94	¼ inch	11¼ inches	1 lb.	DEWIN	$1.65

Packed one in a box.

No. 655 Hand Drill



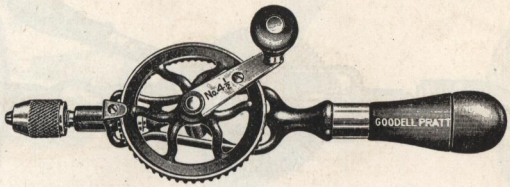
Single Speed Capacity 0 to ¼ Inch

A light, well constructed drill with a black enameled malleable iron frame, mahogany stained hardwood end and crank handles and a three-jawed steel chuck that holds 0 to ¼ inch round shank drills. Steel pinion. Large gear red enameled.

	Capacity	Length	Weight	Code	Price Each
No. 655	¼ inch	12¼ inches	1¼ lbs.	ZAETH	$1.60

Packed one in a box.

No. 4½ Hand Drill



Single Speed Capacity 0 to 5/32 Inch

A well balanced, light weight drill for small diameter drills. Its ease of control minimizes drill breakage.

Black enameled malleable iron frame. Hollow tropical hardwood end handle with screw cap. All-steel three-jawed chuck holds 0 to 5/32 inch round shank drills. Steel pinion. Large gear red enameled with polished edge.

Eight drill points, 1/16 to 11/64 inch in diameter, regular equipment.

	Capacity	Length	Weight	Code	Price Each
No. 4½	5/32 inch	11 7/8 inches	7/8 lb.	WYFEG	$2.50

Packed one in a box.

No. 153 Breast Drill Chuck

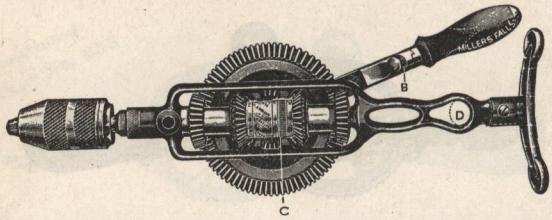
The purpose of this chuck is to convert a three-jawed breast drill into a two-jawed type. It will be found especially practicable where the drilling requirements range from the use of small round shanks to the use of bit and No. 1 Morse Taper shanks, all of which it holds securely. Shank is square for convenience in tightening.

It fits the spindle of any Millers Falls or Goodell-Pratt breast drill equipped with three-jawed chuck, capacity 0 to ½ inch.

	Capacity	Weight	Code	Price Each
No. 153	Universal	13 ozs.	DILAT	$1.80

Packed one in a box.

No. 97 Ratchet Breast Drill



Continuous or Plain Ratchet Two Speed Capacity 0 to ½ Inch

The most complete and versatile breast drill on the market. It has five actions as follows: continuous right or left hand ratchet, intermittent right or left hand ratchet and positive direct drive. All five actions at either high or low speed. Ratchet actions controlled by means of the knurled sleeve (Figure C) between the two low speed pinions. Changes of speed made by sliding the knob on the crank. Gear ratios 2¾ to 1 and 1 to 1.

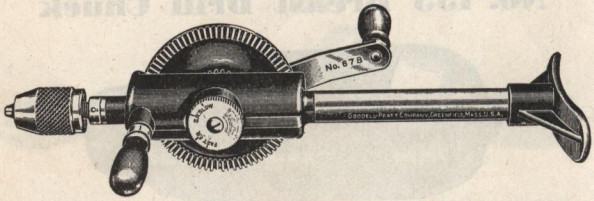
Black enameled malleable iron frame with extra large auxiliary breast plate, not illustrated. Large gear has a polished rim and is finished in red and gold enamel. Double steel pinion drive. Adjustable ball thrust bearing on spindle. All-steel chuck has three jaws with protected springs and holds round shank drills 0 to ½ inch in diameter. Side and crank handles mahogany finished hardwood. Steel crank. Crank handle can be used straight or at right angles.

All exposed steel parts heavily nickel plated.

	Capacity	Length	Weight	Code	Price Each
No. 97	½ inch	17½ inches	8¼ lbs.	DATER	$11.50

Packed one in a box.

No. 678 Ratchet Breast Drill



Right Hand Ratchet Two Speed Capacity 0 to ½ Inch

Equipped with a smooth, powerful ratchet mechanism operating right hand only at both high and low speeds. Positive action also at both high and low speed. Actions changed by turning the knurled dial on the side of the frame. Frame which entirely encloses the steel pinions is die-cast aluminum alloy finished in ebony enamel. Gear ratios 3½ to 1 and 1½ to 1. Large gear red enameled. Enameled aluminum breast plate attached to frame by means of a nickel-plated steel tube.

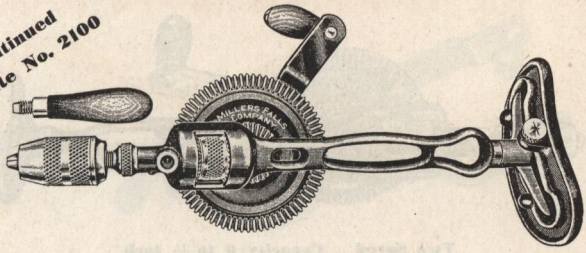
Nickel-plated steel chuck has three jaws holding 0 to ½ inch round shank drills. Spindle equipped with ball thrust bearing. Side and crank handles mahogany finished hardwood.

	Capacity	Length	Weight	Code	Price Each
No. 678	½ inch	17½ inches	4⅜ lbs.	ZAKWE	$7.00

Packed one in a box.

No. 100 Breast Drill

Discontinued
Substitute No. 2100



Two Speed Capacity 0 to ½ Inch

A fine two-speed drill with wholly enclosed steel pinions and quick, easy speed change accomplished by shifting the knurled sleeve between the pinions. Gear ratios 3 to 1 and 1 to 1. Idler roll to equalize large gear bearing.

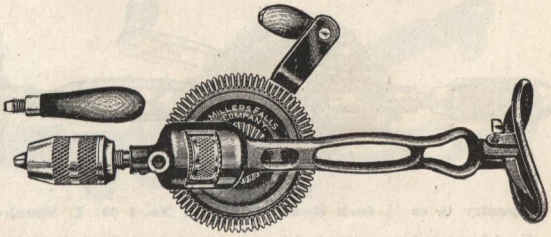
Black enameled malleable iron frame. Large gear red enameled. Breast plate, and auxiliary breast plate and crank, black enameled. Nickel-plated, all-steel chuck has three jaws with protected springs and holds 0 to ½ inch round shank drills. Spindle equipped with ball thrust bearing.

Side and crank handles mahogany finished hardwood.

	Capacity	Length	Weight	Code	Price Each
No. 100	½ inch	18 inches	7 lbs.	DAZEL	$6.40

Packed one in a box.

No. 2100 Breast Drill



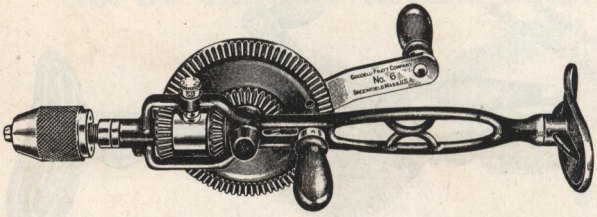
Two Speed Capacity 0 to ½ Inch

Same as No. 100, but without ball thrust bearing on spindle and without the auxiliary breast plate. Chuck and other exposed metal parts polished but not nickeled. Crank and side handles mahogany stained hardwood.

	Capacity	Length	Weight	Code	Price Each
No. 2100	½ inch	17½ inches	5¾ lbs.	DEARY	$5.75

Packed one in a box.

No. 6A Breast Drill



Two Speed Capacity 0 to ½ Inch

This is the world famous No. 6 Breast Drill with a ball bearing added to the spindle making it a still finer drill. The price has been dropped so low that the old No. 6 and No. 245 are eclipsed and consequently discontinued.

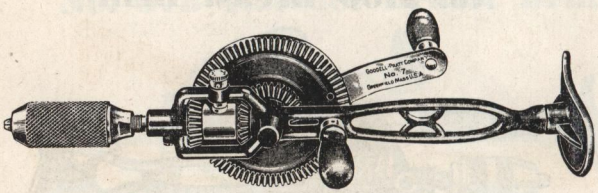
Black enameled malleable iron frame. Large gear is red enameled with polished edge. Ample breast plate. Two speeds with ratios of 3½ to 1 and 1½ to 1. Steel pinions. Polished and nickel-plated steel chuck with three jaws holds 0 to ½ inch round shank drills. Crank polished and nickeled.

Side and crank handles mahogany finished hardwood.

	Capacity	Length	Weight	Code	Price Each
No. 6A	½ inch	16 inches	4½ lbs.	WYGGA	$5.75

Packed one in a box.

No. 7 Breast Drill



Two Speed
Capacity ⅛ to ½ Inch Round, Bit and No. 1 M. T. Shanks

Similar to No. 6A above, but equipped with a two-jawed chuck that holds ordinary bit shank, ⅛ to ½ inch round and No. 1 Morse Taper shank drills.

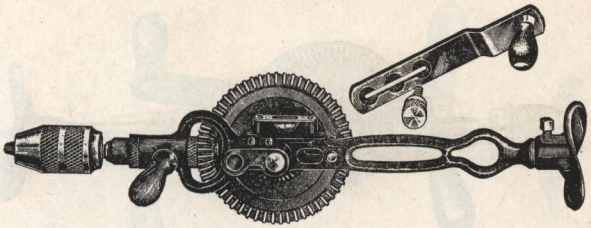
Two speeds with ratios of 3½ to 1 and 1½ to 1 changed by turning the shifter knob at the side of the frame. Steel pinions. Large gear red enameled with polished edge. Black enameled malleable iron frame. Chuck and crank nickel plated.

Side and crank handles mahogany finished hardwood.

	Capacity	Length	Weight	Code	Price Each
No. 7	Universal	17 inches	4¾ lbs.	WYHHA	$6.25

Packed one in a box.

No. 118 Breast Drill



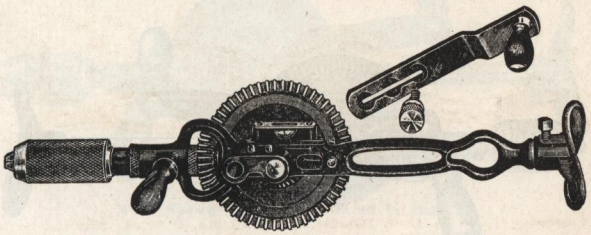
Two Speed Level
Capacity 0 to ½ Inch

A sturdy, two-speed drill built on a black enameled malleable frame equipped with a well protected spirit level. Red and black enameled breast plate. Large gear red enameled with polished, nickeled and buffed edge and rim. Nickeled steel pinion. Gear ratios 3 to 1 and 1 to 1. Nickeled extensible crank. Adjustable ball bearing spindle. Nickeled three-jawed chuck with protected springs holds 0 to ½ inch round shank. Idler roll to equalize large gear bearing. Side and crank handles mahogany finished hardwood. Breast plate red and black enameled.
All exposed metal parts nickel plated.

	Capacity	Length	Weight	Code	Price Each
No. 118	½ inch	17½ inches	6½ lbs.	DECAD	$6.80

Packed one in a box.

No. 12 Breast Drill



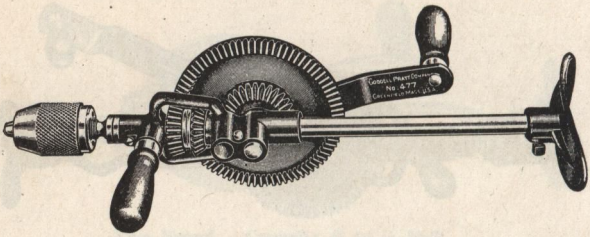
Two Speed Level
Capacity ⅛ to ½ Inch Round, Bit and No. 1 M. T. Shanks

Same sterling construction as No. 118 above, but equipped with a Master chuck holding round shank drills, ⅛ to ½ inch in diameter, bit shanks and No. 1 Morse Taper Shanks.

	Capacity	Length	Weight	Code	Price Each
No. 12	Universal	17½ inches	6½ lbs.	DEBUT	$6.00

Packed one in a box.

No. 477 Breast Drill



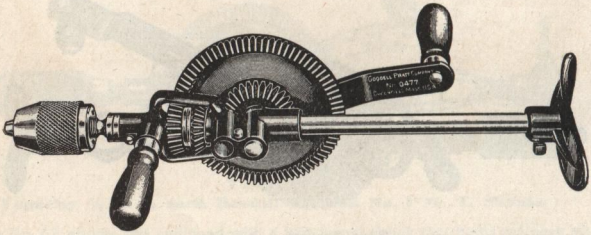
Two Speed Capacity 0 to ½ Inch

A fine, ball bearing, two-speed drill with ratios of 3½ to 1 and 1½ to 1 and the speed change made by unlocking the large gear shaft and transferring it to the other bearing where it is again locked. Two individual steel pinions. Sturdy black enameled frame and breast plate connected by a polished steel shank. Ball bearing spindle. Nicely polished three-jawed chuck holds 0 to ½ inch round shank drills. Crank black enameled. Side and crank handles mahogany lacquered hardwood.

	Capacity	Length	Weight	Code	Price Each
No. 477	½ inch	16½ inches	4⅝ lbs.	YORZE	$4.95

Packed one in a box.

No. 0477 Breast Drill



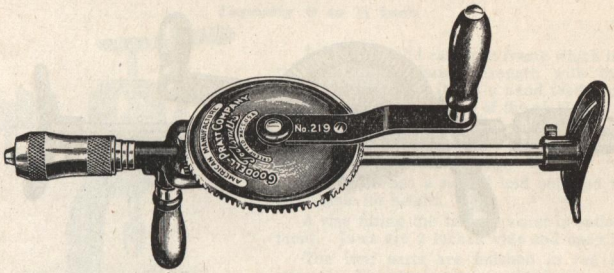
Two Speed Capacity 0 to ½ Inch

Exactly the same as No. 477, but with modifications in the finish that permit offering it at an appreciably lower price.

	Capacity	Length	Weight	Code	Price Each
No. 0477	½ inch	16½ inches	4½ lbs.	YORZG	$3.50

Packed one in a box.

No. 219 Breast Drill



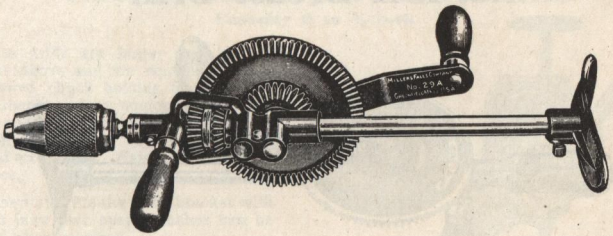
Two Speed Capacity Bit Shanks

Exactly the same as No. 477 in construction and finish, but fitted with a Barber two-jawed chuck holding bit stock shanks only.

	Capacity	Length	Weight	Code	Price Each
No. 219	Bit Shanks	16½ inches	4¾ lbs.	YERUS	$4.40

Packed one in a box.

No. 29A Breast Drill



Two Speed Capacity 0 to ½ Inch

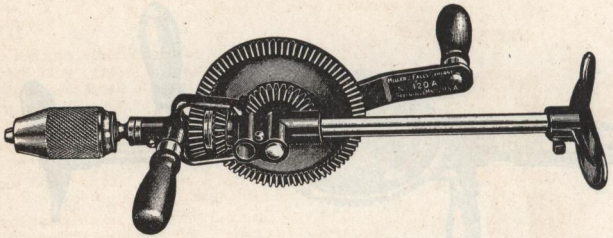
A fine value in the medium priced field. Strong black enameled frame and breastplate connected by a polished steel shank. Two speeds with ratios of 3 to 1 and 1 to 1. Large gear red enameled. Steel pinions. Ball thrust bearing on spindle. Chuck has three jaws with protected springs and holds 0 to ½ inch round shank drills. Side and crank handle mahogany finished hardwood.

All exposed metal parts polished.

	Capacity	Length	Weight	Code	Price Each
No. 29A	½ inch	16½ inches	4⅝ lbs.	DECEM	$4.95

Packed one in a box.

No. 120A Breast Drill



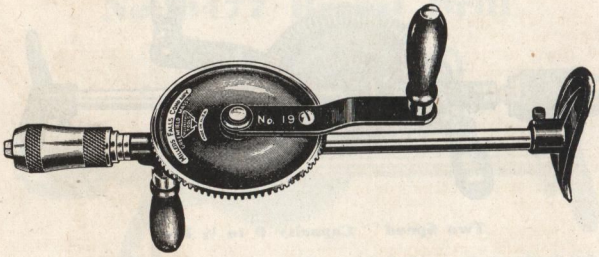
Two Speed Capacity 0 to ½ Inch

Exactly the same construction as No. 29A, but with economies in finish that permit a very low price without sacrificing serviceability.

	Capacity	Length	Weight	Code	Price Each
No. 120A	½ inch	16½ inches	4⅝ lbs.	DARED	$3.50

Packed one in a box.

No. 19A Breast Drill



Two Speed Capacity Bit Shanks

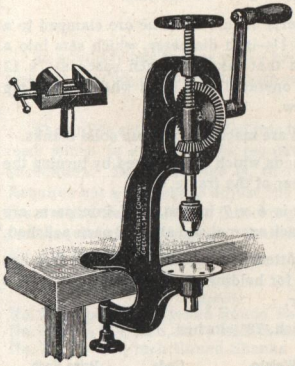
Same construction and finish as No. 29A, but fitted with a Barber two-jawed chuck for holding bit stock shanks only.

	Capacity	Length	Weight	Code	Price Each
No. 19A	Bit Shanks	16½ inches	4¾ lbs.	DECUS	$4.40

Packed one in a box.

Nos. 8 and 8½ Bench Drills

Capacity 0 to ¼ inch



Built on a solid cast-iron frame which is designed to give the maximum strength with the lightest weight consistent. It has a hand feed controlled by the feed wheel on the top of the steel feed screw.

The gears of these drills are all turned and cut from solid blanks, and are fitted carefully so that they run smoothly and easily.

The table has a turned and polished top and is adjustable for height.

A vise fitting the table bracket is optional equipment. Jaws are 2 inches wide and open 1¼ inches.

The iron parts are finished in red and black enamel. The steel parts are polished.

The chuck has three hardened jaws for holding round shank drills from 0 to ¼ inch.

Eight tool steel drill points, 1/16 to 11/64 inch, are furnished with each machine.

		Height above Bench	Weight	Code	Price Each
No. 8	Without vise	13 inches	7½ lbs.	WYHJE	$8.80
No. 8½	With vise	13 inches	9 lbs.	WYHOL	11.55
No. 8½	Vise only		1½ lbs.	WYHUM	2.75

Packed one in a box.

Nos. 9 and 9½ Bench Drills

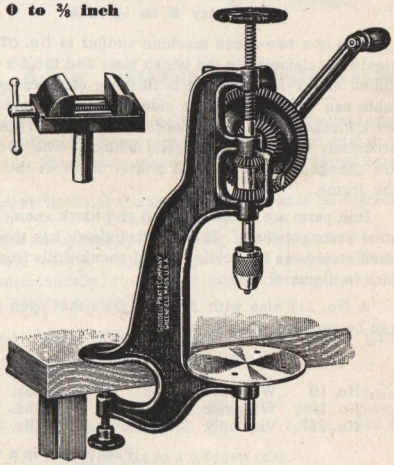
Capacity 0 to ⅜ inch

These drills are larger and heavier than the above and are equipped with a three-jawed chuck holding 0 to ⅜ inch round shanks. Also equipped with two speeds changed by means of the shifter knob on the front of the frame. Hand operated screw feed. Height above bench, 18 inches.

A vise which fits the table bracket with 2½-inch jaws that open 2 inches can be supplied when specified.

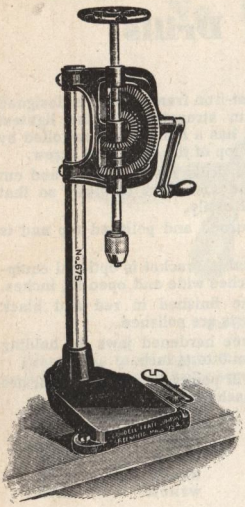
Eight drill points, 1/16 to 11/64 inch in diameter, furnished with each machine.

Iron parts finished in red and black enamel, steel parts polished.



		Code	Price Each
No. 9	Without vise	WYIBD	$12.70
No. 9½	With vise	WYIJL	16.00
No. 9½	Vise only	WYILN	3.30

Packed one in a box.



No. 675 Bench Drill

Capacity 0 to ½ inch

All the working parts of this machine are clamped to a 24-inch steel tube of 1½-inch diameter, which sets into a black enameled base that takes a bench space 8½ x 12 inches. The feed is operated by a hand wheel on the top of the steel feed screw.

Gears and pinions are machine-cut from solid blanks.

There are two speeds which are changed by turning the shifter knob in the rear of the frame.

The table proper is 6 x 7 inches. All iron parts are finished in red and black enamel and all steel parts polished.

Each machine is fitted with an all-steel chuck that has three hardened jaws for holding round shank drills from 0 to ½ inch in diameter.

Height above bench, 28½ inches.

	Weight	Code	Price Each
No. 675	28 lbs.	ZAJEV	$16.50

Packed one in a wooden box.

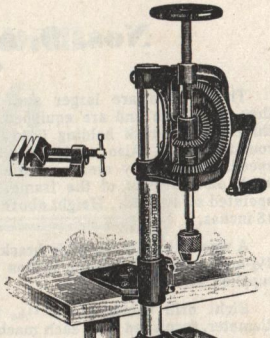
No. 10 Bench Drill

Capacity 0 to ½ inch

This is a two-speed machine similar to No. 675. The steel tube clamps into the bench plate and the 6 x 6½ inch milled and T-slotted table is likewise clamped on. This table can be swung to one side or removed entirely and work blocked up from the floor. The gear and pinions are accurately machined from solid blanks. The two speeds are changed by turning the shifter knob at the back of the frame.

Iron parts are finished in red and black enamel and all steel parts polished. The all-steel chuck has three hardened steel jaws for holding round shank drills from 0 to ½ inch in diameter.

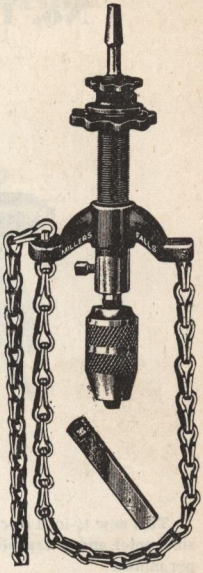
A No. 217 vise with 2⅜-inch jaws that open 3 inches can be supplied when wanted.



		Weight	Code	Price Each
No. 10	Without vise	30 lbs.	WYIRT	$23.00
No. 10½	With vise	34 lbs.	WYIKE	26.75
No. 217	Vise only	4 lbs.	DEIGN	3.75

Packed one in a wooden box.

Chain Drills

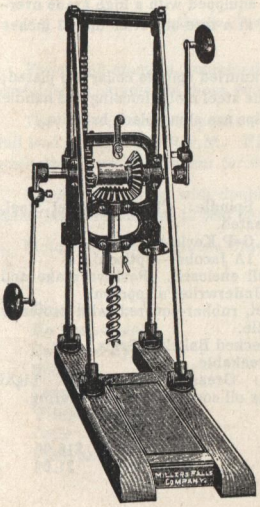


An auxiliary tool for use with a breast drill or bit brace, when extra power is needed, or where pressure cannot be easily applied.

The drill is automatically fed into the work by an adjustable friction feed which is automatically regulated by the resistance the drill encounters. Drill breakage is, therefore, reduced to a minimum. Requires but a moment to adjust the chain. Reverse movement of brace withdraws drill. No intricate parts to get out of order. Hand feed can be used if desired. Four feet of stout chain with each drill. No. 719 illustrated.

	Capacity	Weight	Code	Price Each
No. 717	½-inch Flattened Round Shanks	3½ lbs.	DEDIC	$3.50
No. 718	⅛ to ½ inch, No. 1 M.T. & Bit Shanks	4½ lbs.	DECUR	5.20
No. 719	0 to ½ inch Round Shanks	4½ lbs.	DECLP	5.50

Packed one in a box.



No. 145 Boring Machine

Designed for boring large holes in heavy timbers such as house framing, heavy construction, railroad and dock work, etc. Mechanism mounted on heavy hardwood base.

Bores vertically or at any angle within arc of 50 degrees.

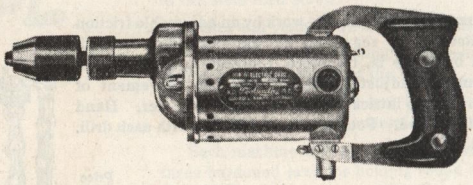
Raises automatically by turning handles as in boring. Adjustable cranks regulate speed and power. Frame locks automatically at topmost point. Boring depth, 12 inches; greater depths to order.

Metal frame black enameled. Other metal parts polished. Handles mahogany finished.

	Boring Depth	Height	Weight	Code	Price Each
No. 145	12 inches	25 inches	28 lbs.	COBOR	$18.90

Packed one in a wooden case.

No. 1114 ¼-Inch Electric Drill



This new ¼-inch electric drill is a remarkable value. It is equipped with a high grade oversize motor and is capable of drilling full ¼-inch holes in steel at a rate of better than 2 inches per minute.

The general appearance is most pleasing. The chuck and knurled spindle collar are plated; the die-cast gear housing is finished in glossy red enamel and the steel motor housing and handle frame have a highly polished rust-proof finish. The handle grips are shiny black bakelite.

Specifications

Capacity (In steel)	¼″
Speed: No Load, R.P.M.	2750
Speed: At rated Load, R.P.M.	1500
Amps: Full Load	2.2
Length	13 3/16″
Weight	5 lbs.

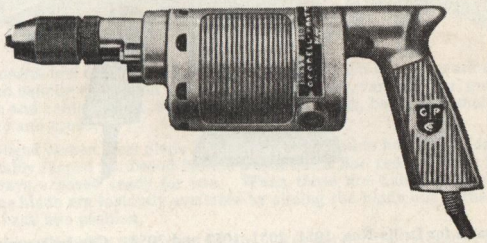
Motor: Universal—A.C. or D.C. Heavily insulated. Fan cooled.
Commutator: Heavy duty. Mica-insulated.
Bearings:
Motor: Self-aligning bronze.
Spindle: Extra long bronze—Ball thrust at rear.
Gears and Spindle: Chrome Nickel Steel, heat-treated.
Chuck: ¼″ G-P Keyless.
¼″ 1A Jacobs—Optional.
Switch: Full enclosed. Positive make and break Underwriter's approval.
Cord: 8 feet, rubber-covered, with protector at handle.
Handle: Checked Bakelite Grips.
Plug: Unbreakable.
Lubrication: Grease in Gear Case. Light machine oil commutator end bearing.

No. 1114 —with G-P Keyless Chuck, 110 or 220V	$18.00
No. 1114J—with 1A Jacobs Chuck, 110 or 220V	21.00

Packed one in a box.

GREENFIELD, MASSACHUSETTS

¼-Inch General Purpose Drills



Built in Two Speeds 1700 and 4000 R.P.M.

Power and stamina, combined with light weight, excellent balance and a wide range of usefulness, characterize these two fine drills.

They are built in two speeds—1700 R.P.M. and 4000 R.P.M. The former gives a drill with a full load speed of 850 R.P.M. Nicely suited for general all-round use drilling in ferrous metal, while the latter is excellent for drilling in non-ferrous metals, polishing, grinding and buffing.

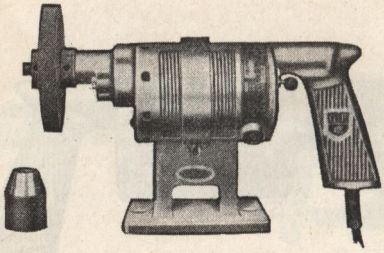
Regularly equipped with double ball bearing spindle, hardened alloy steel gears, all-steel three-jawed chuck and 12 feet of rubber-covered cable with unbreakable rubber plug.

Motors are Westinghouse Universal type for alternating or direct current.

	No. 1051	No. 2051	No. 1052	No. 2052
Capacity	¼″	¼″	¼″	¼″
No Load Speed	1750	1750	4000	4000
Full Load Speed	850	850	2000	2000
Voltage	110	220	110	220
Length	11¾″	11¾″	11¾″	11¾″
Weight, pounds	4¼	4¼	4¼	4¼
Code	ZOZHY	ZOZID	ZUJVY	ZUJYV
Price each	$24.00	$24.00	$25.00	$25.00

Packed one in a box.

No. 1110 Bench Stand



A sturdy, trim stand for Drills Nos. 1051, 2051, 1052 and 2052. Can be screwed or clamped to a bench or held in a vise.

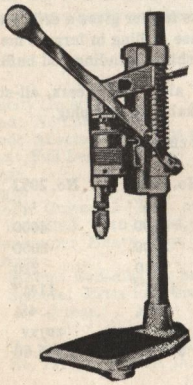
Drill is easily and quickly installed or removed by loosening or tightening the retaining band controlled by large hand screw at back.

Nicely finished in aluminum, red and black enamel.

Weight, 3½ pounds.

		Code	Price Each
No. 1110	Stand only	ZOYMT	$1.50
No. 1110A	Stand with 4-inch grinding wheel and knurled collar	ZOYNV	3.00

Packed one in a box.



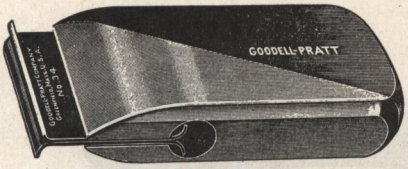
No. 1105 Electric Drill Stand

This stand converts Drills Nos. 1051, 2051, 1052 and 2052 into a sturdy, practical bench drill with a powerful lever feed. The head is mounted on a heavy steel tube that is very securely held in the base. Drill held in place by means of a simple but effective clamping device.

Height above bench, 25 inches.
Diameter of column, 1½ inches.
Size of finished table, 6 x 7 inches.
Bench space required, 8½ x 12 inches.
Depth of feed, 3½ inches.
Chuck to table, 10½ inches.
Height of head adjustable.
Drills to center of a 10-inch circle.
Compensating spring.

	Weight	Code	Price Each
No. 1105	22 lbs.	ZOYLS	$12.00

Nos. 34 and 35 Wood Scrapers



The most useful tool ever devised for putting a fine finish on woodwork of every description. It will be found equally efficient in removing paint, lacquer, varnish, dirt, gum, grease and paper from furniture and cabinet work, stairs, doors, floors, walls, boats, automobiles, toys, etc., with surprising ease and speed.

The four-edged carbon steel blade is carefully tempered to hold keen edge: It is held firmly in the comfortably shaped hardwood handle which has a fine red and black lacquer finish. Two edges are always exposed ready for use. When these are dulled the two sharp edges at the other end of the blade are instantly available by sliding the blade out of the handle, reversing it and sliding it back into position.

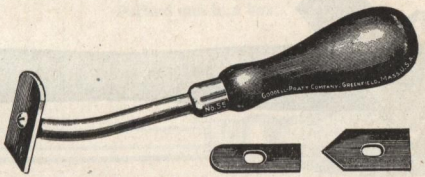
Resharpening with a fine file is very simple. It is not necessary to turn the edge with a steel as with other types of scrapers.

	Width Blade	Length	Weight	Code	Price Each
No. 34	2½ inches	5 inches	5 ozs.	YOOLU	$0.50
No. 35	1½ inches	5 inches	2¾ ozs.	YOOMA	.25
No. 346	Extra blades for No. 34			YOONY	.35
No. 356	Extra blades for No. 35			YOOPI	.15

No. 34 is packed one dozen in the three-color counter display illustrated above.

No. 35 one dozen in a box.

No. 55 Wood Scraper



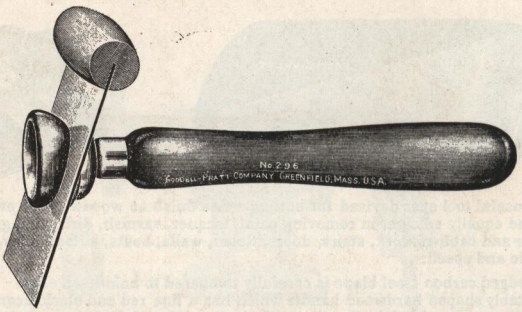
A new scraper with three interchangeable blades that give three flat scraping edges, ¼ inch, ½ inch and ¾ inch wide, two curved edges, ¼ inch and ¾ inch wide, and one V edge. These permit doing a delicate job of scraping in small spaces that cannot be reached with the ordinary tool. Particularly useful in refinishing antiques, removing paint from glass, moldings, etc.

Each scraper mounted on an attractive two-color display card with the extra blades in a cellophane envelope.

	Card	Weight	Code	Price Each
No. 55	4 x 7 inches	3 ozs.	YAGPI	$0.35

Packed six in a box.

No. 296 Floor Scraper



This new scraper has a very quick, positive adjustment of the blade. It is equipped with a practical ball joint that permits setting the blade at a wide range of angles and pitches by simply loosening and tightening the handle.

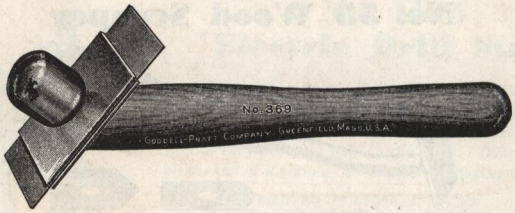
The blade, which is reversible so all four edges can be used, is made of finest quality tool steel, 3 x 4½ inches, hardened and tempered to hold the ideal scraping edge.

A large, well shaped blade handle is provided to which ample pressure can be applied without discomfort. Both handles are turned from selected hardwood and have a fine mahogany lacquer finish.

	Width	Length	Weight	Code	Price Each
No. 296	3 inches	9⅞ inches	¾ lb.	YICOM	$1.20

Packed one in a box.

No. 369 Floor Scraper



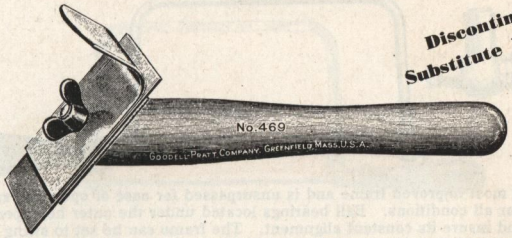
This floor scraper has a selected hardwood handle with polished mahogany finish, 11 inches long, turned down to afford a comfortable grip and set at the correct angle. The weight of the large adjusting knob, which also acts as a handle, supplies most of the necessary pressure to the blade, making wood scraping a comparatively easy operation.

The blade, which is reversible, is made from the finest quality of tool steel, 3 x 4½ inches. It is hardened and tempered in such a way that it will hold a good cutting edge.

	Width	Length	Weight	Code	Price Each
No. 369	3 inches	11½ inches	1¾ lbs.	YOBHA	$1.10

Packed one in a box.

No. 469 Floor Scraper



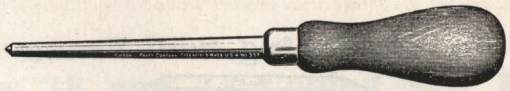
Discontinued
Substitute No. 296

Same as No. 369, but with a wing nut in place of the knob and a curved steel plate for applying pressure.

	Width	Length	Weight	Code	Price Each
No. 469	3 inches	11½ inches	1¼ lbs.	YOPZO	$1.65

Packed one in a box.

No. 357 Scraper Steel or Burnisher

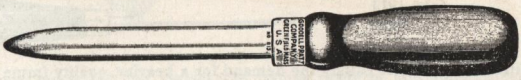


This scraper steel, or burnisher, has a round tool steel blade correctly tapered, mirror polished and glass hard for turning a scraper edge. The blade is 4½ inches long, hardened and polished. The handle is polished hardwood, protected by a nickel-plated steel ferrule.

	Blade	Length Overall	Weight	Code	Price Each
No. 357	4½ inches	8¾ inches	4 ozs.	YIZHY	$0.55

Packed one in a box.

No. 813 Oval Blade Burnisher



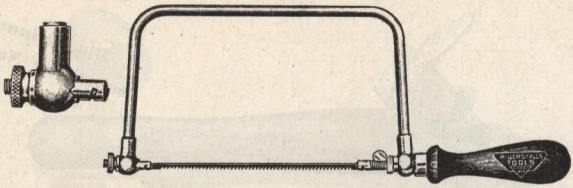
The highly polished blade of this tool is oval in shape, with a nicely pointed end. It is 4 inches long, carefully hardened, and set in a comfortable polished hardwood handle protected by a nickel-plated ferrule.

The shape of the blade, with its smooth, convexed point, makes it possible to do a great variety of fine burnishing with this tool. Also makes a fine scraper steel.

	Blade	Length Overall	Weight	Code	Price Each
No. 813	4 inches	7¾ inches	3 ozs.	ZEJDO	$0.70

Packed six in a box.

No. 42 Coping Saw Frame



This is our most improved frame and is unsurpassed for ease of operation and convenience in sawing under all conditions. Ball bearings located under the outer head permit free action of the blade and insure its constant alignment. The frame can be set to swing free regardless of the direction th blade takes in sawing. A circle can be cut out without stopping to adjust it.

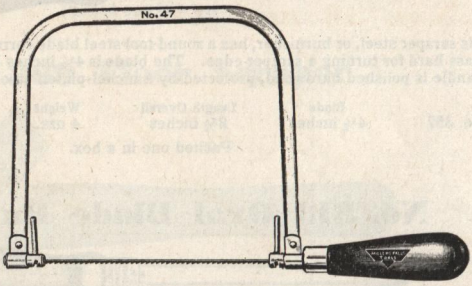
By means of locking devices at both ends of the blade, it can be locked rigid in the frame facing in any one of four directions. Holds both Nos. 60 and 65 blades. Three No. 60 blades with each frame.

Frame of heavy steel wire, polished and nickel plated. Stained hardwood handle.

	Depth Throat	Weight	Code	Price Each
No. 42	4⅛ inches	7 ozs.	IRADE	$1.60

Packed three in a box.

No. 47 Coping Saw Frame



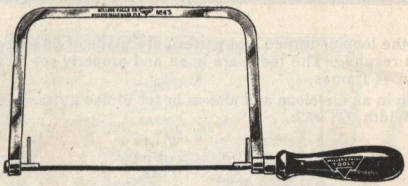
A new addition to the line to satisfy the demand for a heavier, quality frame with a greater depth of throat. The frame is made of 3/16 x 3/8 inch round edge spring steel. The studs are designed for holding 6 or 6½ inch coping saw blades of the loop, pin and other types. The pins set firmly in the studs permit the blade to be turned in any desired direction. Tension on the blade is controlled by turning the mahogany lacquered hardwood handle. One No. 65 blade furnished with each frame.

All exposed metal parts heavily nickel plated and buffed.

	Depth Throat	Weight	Code	Price Each
No. 47	6½ inches	9 ozs.	IRITO	$0.90

Packed four in a box.

No. 43 Coping Saw Frame



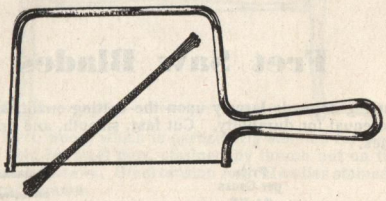
This is a rigid, durable frame, made of stiff, flat spring steel. Blade is controlled by pins in studs at either end, making it unnecessary to remove blade from frame when it is desired to change direction of cut. Blades are strained by turning handle, and can be locked at any angle by turning handle against frame clamp. Holds both Nos. 60 and 65 blades. One No. 65 blade furnished with each frame.

Nickeled metal parts. Stained hardwood handle.

	Depth Throat	Weight	Code	Price Each
No. 43	4¾ inches	6 ozs.	IRIAN	$0.75

Packed six in a box.

Nos. 38 and 44 Coping Saw Frames



These are low priced but serviceable frames made of stiff round steel stock, ¼ inch in diameter, that affords ample tension for the blade. Blades are faceable in four directions. Holds Nos. 50 and 60 blades.

No. 44 is regularly equipped with one No. 50 blade in the frame and one dozen extra blades.

No. 38 is regularly equipped with one No. 50 blade in the frame only.

	Depth Throat	Weight	Code	Price Each
No. 38	4 inches	4 ozs.	IRAAT	$0.15
No. 44	4 inches	5 ozs.	IRISH	.25

Packed six in a box.

No. 50 Coping Saw Blades

These blades of the loop or turned end pattern are made of fine steel uniformly heat-treated to produce excellent results. The teeth are keen and properly set for fast, clean cutting. For use with Nos. 38 and 44 frames.

Packed one dozen in an envelope and also in boxes of five gross, each gross separately wired. Length, 6 inches. Width, 1/16 inch.

		Weight per Gross	Code	Price per Gross
No. 50	Wired	6 ozs.	IROUS	$1.20
No. 50	In envelopes	6 ozs.	IROUX	1.40

Nos. 60 and 65 Coping Saw Blades

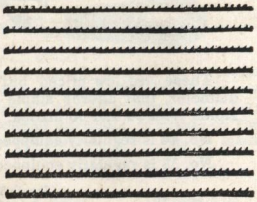
Pin pattern blades are heavier, cut faster and straighter and will outwear the finer tooth blades. No. 60 for use in frames Nos. 42, 43, 44 and 47. No. 65 for use in Nos. 42, 43 and 47.

	Size	Weight per Gross	Code	Price per Gross
No. 60	6 x 3/32 inch	9 ozs.	ISCHI	$2.50
No. 65	6½ x 3/32 inch	11 ozs.	ISIAC	2.50

Fret Saw Blades

Successful fret sawing depends largely upon the cutting qualities of the blades. "Millers Falls" blades have no equal for durability. Cut fast, smooth, and are of uniform high quality. Length overall, 5 inches.

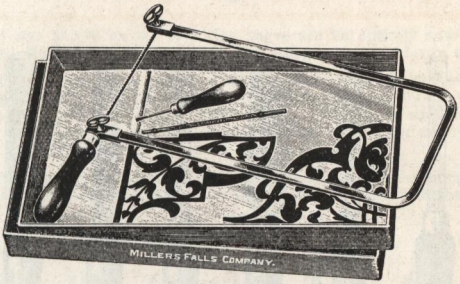
Nos.	Price per Gross
000	$1.75
00	1.75
0	1.75
1-3	1.85
4-6	2.00
7-9	2.10
10-12	2.20
Asst. 0-6	1.85
1-6	1.85



Code—IVORY

Packed one gross each size in a package and ten gross in a box.
Also put up ten gross in a box, each gross assorted Nos. 1 to 6.

No. 2 Fret Saw Set

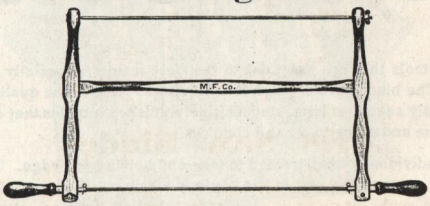


An excellent set for amateurs. The frame is of high grade spring steel, with enameled handle, and patent clamps, which hold the blade securely. Frame has depth of 12 inches, width of 5 inches, and is highly polished and nickel plated. Other articles include twelve blades, one awl, one sheet of impression paper and three sheets of designs.

	Throat	Weight	Code	Price per Set
No. 2	12 inches	17 ozs.	ITIVE	$1.70

Packed one set in a box.

No. 357 Turning Saw Frame



This frame is made of birch wood, which is particularly adapted for web saws because it is light, yet strong. Blades held by steel pins, strained by thumb nut on the steel tension rod. Friction on handles regulated by screws. Steel tension rod. Handles stained. Depth, 7¼ inches. One blade furnished with each frame.

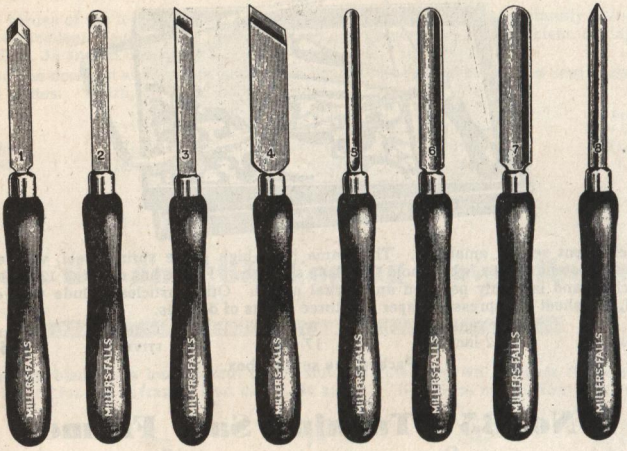
	Blade	Weight	Code	Price Each
No. 357	14 x 3/16 inches	1⅜ lbs.	INLAY	$1.85
No. 357	18 x 3/16 inches	1⅝ lbs.	INLET	1.95
No. 357	24 x 3/16 inches	1⅞ lbs.	INMEW	2.30

Packed one in a box.

Turning Saw Blades

	Width	Weight per Dozen	Code	Price per Dozen
14 inches	3/16 inch	5 ozs.	INNER	$3.85
18 inches	3/16 inch	6 ozs.	INNOX	4.85
24 inches	3/16 inch	9 ozs.	INNOF	6.80

Nos. 1 to 8 Turning Tools



Full size, heavy tools that are essential to the best results, especially on work of the more pretentious kind. The blades are 4½ inches long, forged from a fine quality of tool steel. The heavy tangs are solidly seated in long, smooth, finely finished handles that can be used for hours without undue fatigue and allow two-hand control.

The blades are individually heat-treated to take and hold a keen edge. The edges are ground and honed ready for use and the rest of the blade is nicely polished.

Handles are hardwood with a mahogany lacquer finish.

Blade, 4½ inches. Length overall, 13 inches.

	Type	Code	Price Each
No. 1	Spear Point	WYBHA	$0.70
No. 2	Round Nose Chisel	WYCHY	.70
No. 3	½-inch Skew Chisel	WYDGE	.70
No. 4	1-inch Skew Chisel	WYEXO	.90
No. 5	¼-inch Gouge	WYFIX	.70
No. 6	½-inch Gouge	WYGJA	.70
No. 7	¾-inch Gouge	WYGYW	.90
No. 8	Parting Tool	WYHMA	.75
No. 1188	Set of one each Nos. 1 to 8	ZISOX	6.05

Packed six in a box or one set in a box.

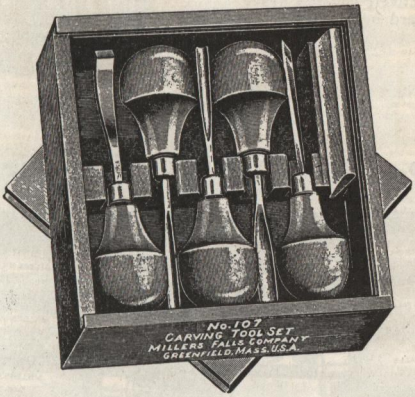
New Carving Tool Line

The carving tool sets shown on the following pages are an entirely new line, superseding old Millers Falls Sets Nos. 1, 2 and 3, to which they are greatly superior in many ways.

The blades are forged from a fine quality of steel, heat-treated with the utmost care to take and hold a razor-keen edge. They are shipped with these edges nicely ground but should be given a final touch up on a fine oilstone before using. The blades are beautifully polished their entire length and fitted with selected maple handles shaped for nicety of manipulation and hand comfort. They are finished with clear lacquer.

Extreme care has been exercised in the selection of the types of blades making up the several sets. The assortments provide the greatest scope of work possible with the number of tools involved.

No. 107 Carving Tool Set



A set designed primarily for Boy Scouts and other individuals attracted to the fun and pleasure to be derived from wood and linoleum block carving. It consists of six tools, as follows:

1—3/8-inch Bent Chisel (B) 1—1/4-inch Skew Bevel Chisel (C) 1—3/8-inch Bent Gouge (D)
1—3/32-inch U Tool (E) 1—3/32-inch Veining Tool (F) 1—Carborundum Stone

The forged and carefully heat-treated blades are well edged and nicely polished. The lacquered maple handles are of a special shape that fits snugly into the palm of the hand. They are flatted on one side so that they are in the proper working position when picked up off the bench.

	Length of Tools	Weight	Code	Price Each
No. 107	5 inches	3/4 lb.	YAYOL	$2.50

Packed one set in lacquered lock corner, slide cover wooden box.

No. 106 Carving Tool Set

A set of six tools selected to give a wide range of operation and effects in wood and linoleum. The blades are forged from high quality steel, carefully heat-treated, nicely polished and edged. The handles, protected with nickeled ferrules, are hardwood, with a fine mahogany lacquer finish. Tools consist of 1—5/16-inch Straight Chisel (A), 1—3/8-inch Bent Gouge (D), 1—3/8-inch Bent Chisel (B), 1—3/32-inch U Tool (E), 1—1/4-inch Skew Bevel Chisel (C) and 1—3/32-inch Veining Tool (F).

	Length of Tools	Weight	Code	Price per Set
No. 106	6¼ inches	¾ lb.	YAYNA	$3.00

Packed in an attractively covered heavy cardboard box.

No. 108 Carving Tool Set

The blades in this set are longer and heavier and are equipped with a forged bolster that protects the handles when a mallet is used to drive the tool fitting them for considerably heavier work. They consist of the following:

One each ½-inch Straight Chisel (No. 1), ¼-inch Skew Chisel (No. 4), 7/16-inch Gouge (No. 7), ¼-inch Gouge (No. 5), ¼-inch Straight Chisel (No. 9), and V Tool (No. 3).

Blades carefully edged and nicely polished. Natural lacquered maple handles.

	Length of Tools	Weight	Code	Price per Set
No. 108	8 inches	¾ lb.	YAYRE	$4.40

Each set packed in a heavy cardboard box with an attractive imitation red leather cover.

No. 109 Carving Tool Set

A de luxe set of nine fine chisels packed in a substantial, beautifully finished lock corner box with hinged cover that serves as a permanent container.

The blades, hammer forged from the finest tool steel, are 8 inches long and are fitted with a forged bolster that protects the handle when a mallet is used. The blades are beautifully polished and the cutting edges carefully honed.

The following tools make up the set:

1— ½-inch Straight Chisel (No. 1)
1— ¼-inch Straight Chisel (No. 9)
1—7/16-inch Gouge (No. 7)
1— ½-inch Gouge (No. 8)
1— ¼-inch Gouge (No. 5)
1— ¼-inch Curved Gouge (No. 2)
1— ¼-inch Skew Chisel (No. 4)
1— ⅜-inch Bent Chisel (No. 6)
1— ¼-inch V Tool (No. 3)

The handles, protected with nickeled ferrules, are natural lacquered maple. Their shape insures ease and comfort in use.

	Length of Tools	Weight Set	Code	Price per Set
No. 109	8 inches	2¾ lbs.	YAYTI	$8.00

Packed one set in a box.

NAIL SETS AND PUNCHES

Careful selection of the best tool steel, accurate machining and exact heat-treating processes are essential in the manufacture of sets and punches that can stand up under severe punishment and give full return for the purchase price.

The tools shown on the following pages have perfectly formed cups or points—hardened with the utmost care, which minimizes breakage and enables them to function properly. The bodies have a clean, deep knurling that affords a sure grip. The heads are shaped, chamfered and tempered to stand a lot of hammering without mushing over.

The entire line is nicely polished and finished bright or blued, as specified.

Square Head Nail Sets

The advantages of this type of head are many. Because of the larger striking surface the head will wear longer before it is rounded over. There is less chance of striking the set on an angle and therefore less sting on the fingers. It will not roll on an inclined surface. When carried in the pocket with other small tools it is easily picked out without removing the others. Head, 3/8 inch square. Its convenience and durability will be appreciated by every carpenter and mechanic. Hardened and tempered points and heads. Bright finish.

	Points	Body	Length	Weight per Dozen	Code	Price per Dozen
No. 451	1/32 inch	5/16 inch	4 inches	17 ozs.	MACAW	$1.50
No. 452	2/32 inch	5/16 inch	4 inches	17 ozs.	MACER	1.50
No. 453	3/32 inch	5/16 inch	4 inches	17 ozs.	MACHO	1.50
No. 454	4/32 inch	5/16 inch	4 inches	17 ozs.	MADAR	1.50
No. 455	5/32 inch	5/16 inch	4 inches	17 ozs.	MADIA	1.50
No. 4501	One dozen assorted as listed below			17 ozs.	MADLY	1.50

Unless otherwise specified, the following assortment will be furnished: two each 1/32 and 4/32 inch; four each 2/32 and 3/32 inch. Packed one dozen of a size, or assorted, in a box.

No. 4500 Nail Set—Display

A full color cut of this display appears on the opposite page.

It takes up but little space on the counter and will turn stock rapidly. The display holds 24 square head nail sets and is given free with the first order for three dozen of nail sets Nos. 451-455 or 4501 either straight or assorted sizes.

	Base	Height	Weight	Code	Price Each
No. 4500	4 3/4 inches	5 1/2 inches	3 3/4 lbs.	MADRE	$4.50

Packed one in a box.

No. 460 Square Head Center Punch

Hardened and tempered points and heads. Bright finish.

	Body	Length	Weight per Dozen	Code	Price per Dozen
No. 460	5/16 inch	4 inches	17 ozs.	MALTA	$1.50

No. 470 Square Head Prick Punch

Hardened and tempered points and heads. Bright finish.

	Body	Length	Weight per Dozen	Code	Price per Dozen
No. 470	5/16 inch	4 inches	17 ozs.	MARES	$1.50

Packed twelve in a box.

No. 310 Nail Sets

Made in both bright and blued finish. Blued furnished, unless bright is specified.

	Points	Body	Length	Weight per Dozen	Code	Price per Gross
No. 310	1/32 inch	9/32 inch	4 inches	13 ozs.	MAGIC	$10.00
No. 310	2/32 inch	5/16 inch	4 inches	13 ozs.	MAGNA	10.00
No. 310	3/32 inch	5/16 inch	4 inches	13 ozs.	MAGOT	10.00
No. 310	4/32 inch	5/16 inch	4 inches	13 ozs.	MAGUS	10.00
No. 310	5/32 inch	5/16 inch	4 inches	13 ozs.	MAHOL	10.00

Unless otherwise specified, the following assortment will be furnished: two each 1/32 and 4/32 inch; four each 2/32 and 3/32 inch.

Packed one dozen of a size, or assorted, in a box.

Display Sets

No. 324

No. 324

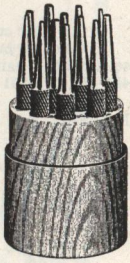
This set contains twenty-four assorted sizes No. 310 Nail Sets. Box is of hardwood, covered with paper.

	Weight	Code	Price per Set
No. 324	1 5/8 lbs.	MAIAN	$1.90

No. 312

This set contains twelve assorted sizes No. 310 Nail Sets. Box and cover of hardwood, nicely polished.

	Weight	Code	Price per Set
No. 312	1 lb.	MAINE	$1.00



No. 312

No. 999 Nail Sets

A sturdy set with a finely knurled 3/8-inch body furnished with 2/32, 3/32, 4/32, 5/32, and 6/32 inch points. Supplied in straight or assorted sizes. Heat-treated points and heads. Well cupped points. Blued finish.

	Points	Body	Length	Approx. Wt. Dozen	Code	Price per Dozen
No. 999	2/32 inch	3/8 inch	4 inches	1 1/2 lbs.	ZIPYR	$2.00
No. 999	3/32 inch	3/8 inch	4 inches	1 1/2 lbs.	ZIPYT	2.00
No. 999	4/32 inch	3/8 inch	4 inches	1 1/2 lbs.	ZIPYZ	2.00
No. 999	5/32 inch	3/8 inch	4 inches	1 1/2 lbs.	ZIPZA	2.00
No. 999	6/32 inch	3/8 inch	4 inches	1 1/2 lbs.	ZIPZO	2.00

Packed one dozen in a box.

Nos. 141 to 146 Center Punches

Nicely knurled bodies. Shank and head polished. Points finely finished.

	Body	Length	Weight per Dozen	Code	Price per Dozen
No. 141	5/16 inch	4 inches	3/4 lb.	MALMA	$1.30
No. 142	3/8 inch	4 inches	1 1/4 lbs.	MANCH	1.60
No. 145	1/2 inch	4 inches	2 1/4 lbs.	MANKS	2.25
No. 146	1/2 inch	5 inches	2 1/2 lbs.	MANSE	2.60

Packed one dozen in a box.

Nos. 167 and 168 Prick Punches

Nicely knurled bodies. Point and head polished. Points finely finished.

	Body	Length	Weight per Dozen	Code	Price per Dozen
No. 167	5/16 inch	4 inches	3/4 lb.	MARRY	$1.55
No. 168	3/8 inch	4 inches	1 1/4 lbs.	MARSH	1.90

Packed one dozen in a box.

No. 997 Hollow Punches

These punches are made from a very high grade of round tool steel about 4 inches long. The centers are knurled to insure a firm grip. They are very carefully hardened and tempered their entire length. The cutting edges are sharpened.

Made in fifteen sizes as follows:

	Hole	Size Body	Code	Price per Dozen
No. 1	5/64 inch	3/8 inch	ZINKA	$4.00
No. 2	3/32 inch	3/8 inch	ZINLE	4.00
No. 3	7/64 inch	3/8 inch	ZINNO	4.00
No. 4	1/8 inch	3/8 inch	ZINON	4.00
No. 5	9/64 inch	3/8 inch	ZINUP	4.00
No. 6	5/32 inch	3/8 inch	ZIOXY	4.00
No. 7	3/16 inch	3/8 inch	ZIPAL	4.00
No. 8	7/32 inch	7/16 inch	ZIPEM	4.30
No. 9	1/4 inch	7/16 inch	ZIPLA	4.30
No. 10	9/32 inch	7/16 inch	ZIPME	4.30
No. 11	5/16 inch	1/2 inch	ZIPOP	4.85
No. 12	11/32 inch	1/2 inch	ZIPPO	4.85
No. 13	3/8 inch	9/16 inch	ZIPPR	6.00
No. 14	13/32 inch	9/16 inch	ZIPRA	6.00
No. 15	7/16 inch	9/16 inch	ZIPRI	6.00

Packed one dozen in a box.

Machinists' Pin Punches

These punches are made from a very high grade of round tool steel about four inches long. The centers are knurled and the points and shanks nicely polished. Every punch is very carefully hardened and tempered its entire length. Blued finish. Average weight per dozen, 1 pound.

	Points	Stock	Code	Price per Dozen
No. 681	1/16 inch	5/16 inch	ZALIZ	$1.45
No. 682	3/32 inch	5/16 inch	ZALOB	1.45
No. 683	1/8 inch	5/16 inch	ZALUC	1.45
No. 684	5/32 inch	5/16 inch	ZALWA	1.45
No. 685	3/16 inch	3/8 inch	ZALYE	1.45
No. 686	7/32 inch	3/8 inch	ZAMAY	1.45
No. 687	1/4 inch	3/8 inch	ZAMCO	1.45
No. 688	5/16 inch	3/8 inch	ZAMEZ	1.45

Packed one dozen in a box.

Heavy Pin Punches

Nicely knurled body. Point and head polished. Points accurately sized.

	Points	Body	Length	Weight per Dozen	Code	Price per Dozen
No. 480	3/16 inch	1/2 inch	6 inches	2 1/2 lbs.	METAL	$3.10
No. 481	1/4 inch	1/2 inch	6 inches	2 3/4 lbs.	METER	3.10
No. 482	5/16 inch	1/2 inch	6 inches	2 3/4 lbs.	METIC	3.10
No. 483	3/8 inch	1/2 inch	6 inches	3 1/4 lbs.	MIAUL	3.10

Packed one dozen in a box.

Light Pin Punches

Three "O.K." Light Pin Punches mounted on an attractive display card. Set contains one each of the following sizes:

Points	Body	Length
1/16 inch	3/16 inch	2 1/4 inch
5/64 inch	3/16 inch	2 3/8 inch
3/32 inch	3/16 inch	2 1/2 inch

	Code	Price per Set
No. 36	MIRZA	$0.35

Packed six sets in a box.

These are the same style of punches as those in No. 36 set, but are larger. Set contains one each of the following sizes:

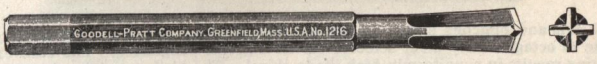
Points	Body	Length
3/32 inch	1/4 inch	2 3/4 inch
7/64 inch	1/4 inch	2 7/8 inch
1/8 inch	1/4 inch	3 inch

	Code	Price per Set
No. 37	MISER	$0.45

Packed six sets in a box.

Star Drills

Forged Manganese Alloy Steel



These drills have remarkable free, fast cutting ability in concrete, brick and stone.

They are forged from a high grade of octagon manganese alloy steel selected for its toughness and ability to hold an edge. The bit and head are carefully hardened and tempered for the severe service expected of them.

The blades and flutes are designed and proportioned to give ample strength and provide adequate chip clearance. The blades taper back slightly and their outer face is ground concentric with the bit to insure free turning. The bit is pointed just enough to start holes easily at the desired point and keep it centered. The blades are long to permit resharpening without reforging.

The blades are polished and the head of the tool is finished in vermillion lacquer with polished face. Made in three lengths—8, 12 and 18 inches.

	Diameter of Cut	Diameter of Stock	Length	Packed per Box	Code	Price per Dozen
No. 814	1/4 inch	3/16 inch	8 inches	12	ZEJEO	$4.00
No. 856	5/16 inch	1/4 inch	8 inches	12	ZEOST	4.00
No. 1211	1/4 inch	3/16 inch	12 inches	12	ZOKLA	4.00
No. 1211½	5/16 inch	1/4 inch	12 inches	12	ZOKLY	4.00
No. 1212	3/8 inch	5/16 inch	12 inches	12	ZOKME	4.00
No. 1212½	7/16 inch	5/16 inch	12 inches	12	ZOKMO	4.30
No. 1213	1/2 inch	3/8 inch	12 inches	6	ZOKOP	4.80
No. 1213½	9/16 inch	3/8 inch	12 inches	6	ZOKOS	5.45
No. 1214	5/8 inch	1/2 inch	12 inches	6	ZOKPO	5.80
No. 1215	3/4 inch	5/8 inch	12 inches	6	ZOKYR	7.05
No. 1215½	7/8 inch	5/8 inch	12 inches	6	ZOKYT	8.20
No. 1216	1 inch	3/4 inch	12 inches	3	ZOLAM	8.80
No. 1216½	1 1/8 inches	7/8 inch	12 inches	3	ZOLAS	11.75
No. 1217	1 1/4 inches	7/8 inch	12 inches	3	ZOLEN	15.10
No. 1217½	1 3/8 inches	1 inch	12 inches	1	ZOLET	18.90
No. 1218	1 1/2 inches	1 1/8 inches	12 inches	1	ZOLIP	23.10
No. 1218½	1 3/4 inches	1 1/4 inches	12 inches	1	ZOLIV	34.65
No. 1219	2 inches	1 3/8 inches	12 inches	1	ZOLMA	49.30
No. 1219½	5/16 inch	1/4 inch	18 inches	6	ZOMPE	5.30
No. 1220	3/8 inch	5/16 inch	18 inches	6	ZOMRO	5.30
No. 1220½	7/16 inch	5/16 inch	18 inches	6	ZOMRU	5.65
No. 1221	1/2 inch	3/8 inch	18 inches	6	ZOMUS	6.30
No. 1221½	9/16 inch	3/8 inch	18 inches	6	ZOMUX	6.80
No. 1222	5/8 inch	1/2 inch	18 inches	3	ZOMYT	7.30
No. 1223	3/4 inch	5/8 inch	18 inches	3	ZONAP	8.55
No. 1223½	7/8 inch	5/8 inch	18 inches	3	ZONAW	9.55
No. 1224	1 inch	3/4 inch	18 inches	3	ZONIR	10.60
No. 1224½	1 1/8 inches	7/8 inch	18 inches	3	ZONIX	13.85
No. 1225	1 1/4 inches	7/8 inch	18 inches	3	ZONOS	17.10
No. 1225½	1 3/8 inches	1 inch	18 inches	1	ZONOY	22.25
No. 1226	1 1/2 inches	1 1/8 inches	18 inches	1	ZONPA	27.70
No. 1226½	1 3/4 inches	1 1/4 inches	18 inches	1	ZONPU	39.90
No. 1227	2 inches	1 3/8 inches	18 inches	1	ZONSO	54.60

Cold Chisels

The chisels and punches shown on this and the following page are hammer-forged from a high grade of octagon alloy steel selected for its extreme toughness. The care exercised in heat-treating results in a uniformly high grade chisel. The blades and heads are ground and nicely polished. The heads have a distinctive vermillion lacquer finish.

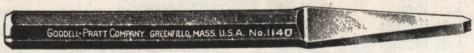
	Width of Blade	Diameter of Stock	Length Overall	Packed per Box	Code	Price per Dozen
No. 1150	1/4 inch	1/4 inch	5 inches	12	ZUKER	$2.50
No. 1152	5/16 inch	1/4 inch	5 inches	12	ZAZYR	2.60
No. 1154	3/8 inch	3/8 inch	5 inches	12	YOONY	2.90
No. 1156	1/2 inch	3/8 inch	5 inches	12	YOOLV	3.10
No. 1158	5/8 inch	1/2 inch	6 1/2 inches	6	YUZYR	5.20
No. 1160	3/4 inch	5/8 inch	7 inches	6	ZABAM	7.00
No. 1162	7/8 inch	3/4 inch	7 1/2 inches	3	ZABIP	10.00
No. 1164	1 inch	1 inch	8 inches	3	ZEAHY	12.00
No. 1166	1 1/8 inches	1 inch	8 1/2 inches	3	ZUKTO	14.00

Long Cold Chisels

Same as the chisels above but longer.

	Width of Blade	Diameter of Stock	Length Overall	Packed per Box	Code	Price per Dozen
No. 1170	5/8 inch	1/2 inch	10 inches	3	ZUKWY	$7.20
No. 1172	3/4 inch	5/8 inch	12 inches	3	ZULIT	10.00
No. 1174	7/8 inch	3/4 inch	14 inches	3	ZULRA	16.00

Cape Chisels



	Width of Blade	Diameter of Stock	Length Overall	Packed per Box	Code	Price per Dozen
No. 1140	1/8 inch	3/8 inch	5 inches	12	YOORC	$3.50
No. 1141	3/16 inch	3/8 inch	5 inches	12	ZEENG	3.90
No. 1142	1/4 inch	3/8 inch	5 inches	12	YOOPZ	4.30
No. 1143	5/16 inch	1/2 inch	6 inches	6	ZEEPH	5.80
No. 1144	3/8 inch	5/8 inch	7 inches	6	ZEERK	7.80
No. 1145	1/2 inch	3/4 inch	7 1/2 inches	6	ZEEWP	10.80

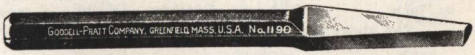
Square Chisel

	Width of Point	Diameter of Stock	Length Overall	Packed per Box	Code	Price per Dozen
No. 1176	5/32 inch	3/8 inch	5 inches	12	YOOSD	$2.65

Diamond Point Chisels

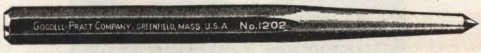
	Width of Point	Diameter of Stock	Length Overall	Packed per Box	Code	Price per Dozen
No. 1178	5/32 inch	3/8 inch	5 inches	12	YOOVG	$2.65
No. 1180	1/4 inch	1/2 inch	6 inches	6	ZULVO	5.00
No. 1182	3/8 inch	5/8 inch	7 inches	6	ZUMAS	7.00
No. 1184	1/2 inch	3/4 inch	8 inches	6	ZUMIV	10.00

Round Nose Cape Chisels



	Width of Point	Diameter of Stock	Length Overall	Packed per Box	Code	Price per Dozen
No. 1190	1/8 inch	3/8 inch	5 inches	12	ZUMTE	$3.50
No. 1191	1/4 inch	1/2 inch	6 inches	6	YOPAV	5.80
No. 1192	3/8 inch	5/8 inch	7 inches	6	ZUMUX	7.80
No. 1193	1/2 inch	3/4 inch	8 inches	6	ZUMWO	10.80

Center Punches



	Diameter of Stock	Length Overall	Packed per Box	Code	Price per Dozen
No. 1202	3/8 inch	5 inches	12	YOPUB	$2.65
No. 1204	1/2 inch	5 1/2 inches	6	ZUNOY	4.40
No. 1206	5/8 inch	6 inches	6	ZUNTA	4.80

Prick Punches

	Diameter of Stock	Length Overall	Packed per Box	Code	Price per Dozen
No. 1199	3/8 inch	5 inches	12	YOPOZ	$2.65
No. 1201	1/2 inch	6 inches	6	ZUNEV	4.80

Solid or Tinners' Punches

	Diameter of Point	Diameter of Stock	Length Overall	Packed per Box	Code	Price per Dozen
No. 1195	5/32 inch	3/8 inch	5 inches	12	YOPCY	$2.65
No. 1196	1/4 inch	1/2 inch	6 inches	6	ZUMZY	4.80
No. 1197	3/8 inch	5/8 inch	7 inches	6	ZUNAT	6.60

Cup Punch

	Diameter of Point	Diameter of Stock	Length Overall	Packed per Box	Code	Price per Dozen
No. 1198	5/32 inch	3/8 inch	5 inches	12	YOPIX	$2.65

The above tools packed one dozen in a carton.

No. 470 Chisel and Punch Set

A most useful set of forged chisels and punches put up in a convenient turned hardwood box with a mahogany lacquer finish.

The set consists of the 12 tools listed below which are fully described on preceding pages.

1—No. 1150 1/4-inch Cold Chisel
1—No. 1154 3/8-inch Cold Chisel
1—No. 1156 1/2-inch Cold Chisel
1—No. 1140 1/8-inch Cape Chisel
1—No. 1142 1/4-inch Cape Chisel
1—No. 1176 5/32-inch Square Chisel
1—No. 1178 5/32-inch Diamond Point Chisel
1—No. 1190 1/8-inch Round Nose Cape Chisel
1—No. 1195 5/32-inch Solid Punch
1—No. 1198 5/32-inch Cup Punch
1—No. 1199 Prick Punch
1—No. 1202 Center Punch

Each tool forged from octagon alloy steel, carefully hardened and tempered with well ground and polished points and heads.

	Weight	Code	Price per Set
No. 470	2½ lbs.	YORAY	$3.40

Packed one in a box.

Taper Pin Punches

Forged from a high grade of octagon alloy steel, ⅜-inch in diameter (except the two smallest sizes which are ¼-inch) and about 6 inches long. They are carefully heat-treated and the points and heads well ground and polished. They have the same distinctive vermillion lacquered head that is used on the rest of our punch and chisel line.

	Size	Diameter of Stock	Code	Per Dozen
No. 573	3/32 inch	¼ inch	YUMEZ	$2.40
No. 413	⅛ inch	¼ inch	YOHYT	2.40
No. 574	5/32 inch	⅜ inch	YUMIB	2.40
No. 415	3/16 inch	⅜ inch	YOILT	2.40
No. 575	7/32 inch	⅜ inch	YUMOC	2.40
No. 416	¼ inch	⅜ inch	YOIPY	2.40
No. 417	5/16 inch	⅜ inch	YOIRB	2.40
No. 418	⅜ inch	⅜ inch	YOJAP	2.40

Packed one dozen in a carton. Average weight, 2 pounds.

No. 572 Pin Punch Set

A useful and convenient set made up of the 8 sizes of punches shown at the top of this page, as follows: 3/32, ⅛, 5/32, 3/16, 7/32, ¼, 5/16, and ⅜ inch.

The container is a round hardwood block and cover nicely turned and finished, providing a convenient holder.

	Weight	Code	Price Each
No. 572	2 lbs.	YUMCO	$2.30

No. 472 Pin Punch Set

This set is made up of an assortment of the pin punches shown above. It contains five sizes with points of the following diameters: ⅛, 3/16, ¼, 5/16, and ⅜ inch.

	Weight	Code	Price Each
No. 472	13 ozs.	YOREZ	$1.00

Packed one set in a box.

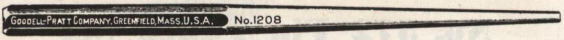
Long Heavy Pin Punches

These punches are heavier and longer than those listed before. The points are 3½ inches long and are made of tool steel carefully hardened, tempered and polished. The shanks are made of hexagonal steel with a hardened and polished head. Overall length, 9 inches.

	Size	Diameter of Stock	Code	Per Dozen
No. 792	3/16 inch	3/8 inch	ZEFUB	$5.00
No. 793	1/4 inch	3/8 inch	ZEFVA	5.00
No. 794	5/16 inch	1/2 inch	ZEFWE	5.00
No. 795	3/8 inch	1/2 inch	ZEFZO	5.00
No. 796	Set of Four Sizes		ZEGBO	1.70

Packed one dozen or one set in a carton.

Aligning or Drift Punches



The points of these punches have a long even taper and a very high polished mirror finish so that they drive easily in tight fits. Will not bend or break. Indispensable for automotive work and assembling structural steel.

	Diameter of Point	Diameter of Stock	Length Overall	Packed per Box	Code	Price per Dozen
No. 1208	3/16 inch	1/2 inch	10 inches	3	ZUNUZ	$7.20
No 1210	1/4 inch	5/8 inch	12 inches	3	ZUNVE	10.00

Ripping Chisels

Forged from a very high grade of octagon manganese alloy steel selected for its extreme toughness when properly heat-treated

The blades are carefully forged to shape, nicely polished and correctly edged to stand up under the severe work for which they are designed. The heads are hardened and polished and finished in a distinctive vermillion lacquer.

The blade is sufficiently offset to raise the head well above the bottom level of the blade, making it easy to drive and affording a good hand grip. Length overall, 12 inches.

	Width of Blade	Size of Stock	Packed per Box	Weight per Box	Code	Price Each
No. 1235	1/2 inch	7/16 inch	6	4 lbs.	ZITOB	$0.60
No. 1236	3/4 inch	9/16 inch	6	5¾ lbs.	ZITOM	.70
No. 1237	1 inch	11/16 inch	3	3¾ lbs.	ZITPA	.80
No. 1238	1¼ inches	13/16 inch	3	4½ lbs.	ZITPY	.90

No. 873 Chisel and Punch Display

A very neat, effective counter display of a popular assortment of cold chisels and punches all of which are mounted in the dull black wood fixture. The thirty-six tools making up the assortment are as follows:

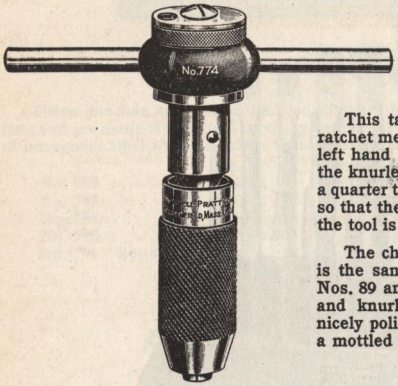
1—No. 413	1/8-inch Pin Punch	1—No. 1160	3/4-inch Cold Chisel
1—No. 415	3/16-inch Pin Punch	1—No. 1162	7/8-inch Cold Chisel
1—No. 416	1/4-inch Pin Punch	1— No. 1164	1-inch Cold Chisel
1—No. 417	5/16-inch Pin Punch	1—No. 1166	1 1/8-inch Cold Chisel
1—No. 418	3/8-inch Pin Punch	1—No. 1176	5/32-inch Square Chisel
1—No. 573	3/32-inch Pin Punch	1—No. 1178	5/32-inch Diamond Point Chisel
1—No. 574	5/32-inch Pin Punch	1—No. 1180	1/4-inch Diamond Point Chisel
1—No. 575	7/32-inch Pin Punch	1—No. 1182	3/8-inch Diamond Point Chisel
1—No. 1140	1/8-inch Cape Chisel	1—No. 1190	1/8-inch Round Nose Cape Chisel
1—No. 1141	3/16-inch Cape Chisel	1—No. 1191	1/4-inch Round Nose Cape Chisel
1—No. 1142	1/4-inch Cape Chisel	1—No. 1192	3/8-inch Round Nose Cape Chisel
1—No. 1143	5/16-inch Cape Chisel	1—No. 1195	5/32-inch Solid Punch
1—No. 1144	3/8-inch Cape Chisel	1—No. 1198	5/32-inch Cup Punch
1—No. 1145	1/2-inch Cape Chisel	1—No. 1199	Prick Punch
1—No. 1152	5/16-inch Cold Chisel	1—No. 1201	Prick Punch
1—No. 1154	3/8-inch Cold Chisel	1—No. 1202	Center Punch
1—No. 1156	1/2-inch Cold Chisel	1—No. 1204	Center Punch
1—No. 1158	5/8-inch Cold Chisel	1—No. 1206	Center Punch

For complete details of individual tools, see pages 110 to 112.

	Base Dimensions	Weight	Code	Price Each
No. 873	8 1/4 x 4 5/8 inches	10 3/8 lbs.	ZERPY	$14.60

Tools and display packed in separate boxes.

No. 774 Ratchet Tap Holder



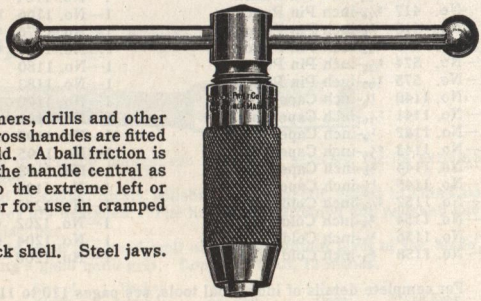
This tap nolder is equipped with our new patented ratchet mechanism. Three actions—right hand ratchet, left hand ratchet, and rigid—are controlled by turning the knurled shifter dial at the top of the tool less than a quarter turn. The shifter dial is protected with a plate so that the action cannot be unintentionally shifted while the tool is in use.

The chuck has capacity for holding ⅜-inch taps and is the same chuck that has proved so reliable on our Nos. 89 and 829 Tap Holders. The shell is extra long and knurled to give a good grip. Steel throughout, nicely polished except for the ratchet body, which has a mottled case-hardened finish.

	Capacity	Length Overall	Weight	Code	Price Each
No. 774	⅜-inch Taps	3⅞ inches	½ lb.	ZEASK	$2.75

Packed one in a box.

Nos. 828 and 829 Tap Holders



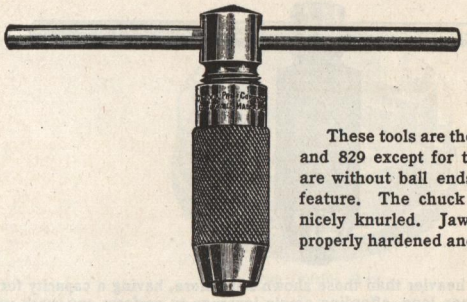
Designed for holding taps, reamers, drills and other tools to be turned by hand. The cross handles are fitted with ball ends to afford a good hold. A ball friction is located in the head, which keeps the handle central as illustrated, but it can be slipped to the extreme left or right at will for greater leverage or for use in cramped spaces.

Extra long, nicely knurled chuck shell. Steel jaws. Steel throughout nicely polished.

	Capacity	Handle	Weight	Code	Price Each
No. 828	7/32-inch Taps	3⅜ inches	3 ozs.	ZEKYH	$0.75
No. 829	⅜-inch Taps	4½ inches	5 ozs.	ZELAC	1.00

Packed one in a box.

Nos. 88 and 89 Tap Holders

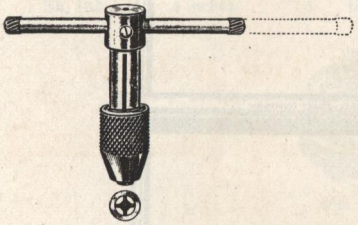


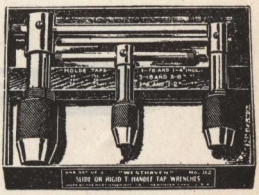
These tools are the same as Nos. 828 and 829 except for the handles, which are without ball ends and the shifting feature. The chuck shell is long and nicely knurled. Jaws are forged steel, properly hardened and tempered.

	Capacity	Handles	Weight	Code	Price Each
No. 88	7/32 inch	3½ inches	3½ ozs.	YATPO	$0.65
No. 89	3/8 inch	4½ inches	4½ ozs.	YATYR	.90

Packed one in a box.

Nos. 10 to 12 Tap Wrenches



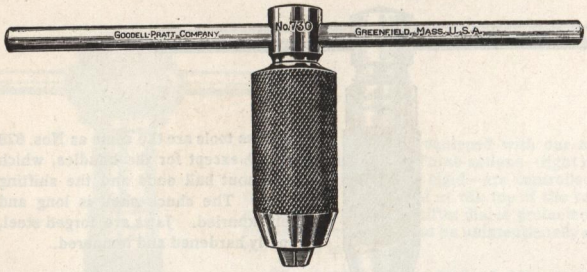


This tool is designed for holding taps, reamers, small drills, or other small tools. It is superior to similar wrenches, because of its slide handle, which permits its use in many places where a rigid handle cannot be turned. For ordinary work handle can be set rigid by means of a set screw. Chuck shell is knurled. Jaws are tempered, sleeve is case-hardened. Centers accurately. Capacities specified are small shank hand tap sizes.

	Length of Handle	Capacity	Weight Each	Code	Price Each
No. 10	3¼ inches	1/16 to ¼ inch	2 ozs.	NAVAL	$0.70
No. 11	4¾ inches	3/16 to 3/8 inch	4 ozs.	NAVEW	.90
No. 12	5¼ inches	¼ to ½ inch	8 ozs.	NAVIC	1.25
No. 112	Set one each Nos. 10, 11, and 12		18 ozs.	NAVVY	2.85

Nos. 10 and 11 packed six, and No. 12, two, in a box. No. 112, one set in a box.

No. 730 Tap Holder



This tool is considerably heavier than those shown heretofore, having a capacity for ½-inch taps. The handle is 10 inches long, affording ample leverage to perform any work within its capacity easily and quickly.

	Capacity	Handle	Weight	Code	Price Each
No. 730	½ inch	10 inches	1 lb.	ZATKO	$2.50

Packed one in a box.

Nos. 689 and 789 Tap Holders

These tools have been brought out to meet the demand for a holder with long shank to reach otherwise inaccessible positions.

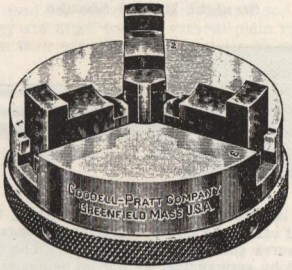
The knurled chuck with capacity to ⅜-inch taps is identical with our No. 89 and No. 829.

The cross handles of these holders are held in position by the knurled screw shown in the end of the shank. This permits shifting the length to one side or the other giving a much greater leverage than in the central position. By removing the knurled screw the handle can be carried in the hollow shank, conserving space.

	Capacity	Length of Shank	Length Overall	Code	Price Each
No. 689	⅜ inch	6 inches	8¼ inches	ZAMIB	$1.70
No. 789	⅜ inch	10 inches	12¼ inches	ZEFAV	2.20

Packed one in a box.

Scroll Chucks



With Outside Jaws

Indispensable for use on small lathes for holding work of various shapes and diameters. The jaws are operated by turning the knurled ring, moving them in or out as desired. The jaws are carefully fitted so that steps and center are accurate and concentric. Each jaw is fitted to the slot it runs in. Jaws must always run in the slot of corresponding number. After being fitted the jaws are carefully heat-treated and all other parts are nicely polished. A spanner is furnished with each chuck. No face plates furnished. A hole runs through the body of each chuck so that long rods may be held.

With Outside Jaws

	Diameter	Hole	Weight	Code	Price Each
No. 180	2 inches	½ inch	1 lbs.	YEJFA	$10.50
No. 181	3 inches	11/16 inch	2¼ lbs.	YEJLY	12.60
No. 182	4 inches	1 inch	4¾ lbs.	YEJYL	14.70

With Inside Jaws

With Outside and Inside Jaws

	Diameter	Hole	Weight	Code	Price Each
No. 180½	2 inches	½ inch	1⅛ lbs.	YEJGE	$13.70
No. 181½	3 inches	11/16 inch	2⅝ lbs.	YEJOJ	15.70
No. 182½	4 inches	1 inch	5⅜ lbs.	YEKAG	17.90

Packed one in a box.

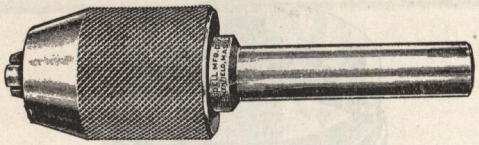
Fitting Scroll Chucks

A scroll chuck must be accurately fitted to a face plate so that it runs concentric with the lathe spindle on which it is used. Any of the chucks listed above can be fitted in this manner for use on our Nos. 125 and 494 Bench Lathes at the following prices:

Nos. 180 and 180½ $3.00
Nos. 181 and 181½ 3.50
Nos. 182 and 182½ 3.50

Greenfield Drill Chucks

Straight Round Shanks



The shell of these chucks is all one piece, the shank forming the back of the chuck. The shank thread is concealed and cannot be damaged by rough usage. These chucks have a ball bearing in the center that insures smooth, easy operation. The jaws are carefully fitted and hardened. They are actuated by springs that cannot be damaged No spanner is required to tighten these chucks but one is provided to loosen the two largest sizes. Furnished with ½-inch or 41/64-inch round shanks.

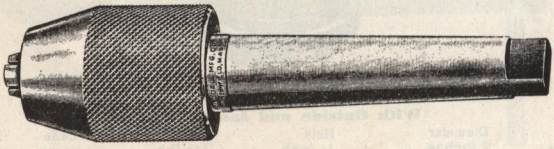
Half-inch shanks supplied unless otherwise specified.

	Capacity	Weight	Code	Price Each
No. 1501	0 to 5/32 inch	5 ozs.	ZIYJL	$2.10
No. 1502	0 to ¼ inch	9 ozs.	ZIYOY	2.60
No. 1503	0 to ⅜ inch	15 ozs.	ZIZAV	3.70
No. 1504	0 to ½ inch	21 ozs.	ZIZVA	5.30

Packed one in a box.

Greenfield Drill Chucks

Morse Taper Shanks



Same as the chucks above, but provided with standard Morse Taper Shanks Nos. 1, 2, 3, and 4. Each chuck will run accurately on its own shank.

In ordering be sure to specify which size shank is desired.

	Capacity	Code	Price Each No. 1 or No. 2	Price Each No. 3 or No. 4
No. 1501M.T.	0 to 5/32 inch	ZIYLN	$2.90	
No. 1502M.T.	0 to ¼ inch	ZIYTA	3.40	
No. 1503M.T.	0 to ⅜ inch	ZIZIX	4.50	$6.00
No. 1504M.T.	0 to ½ inch	ZIZWE	6.00	7.60

Packed one in a box.

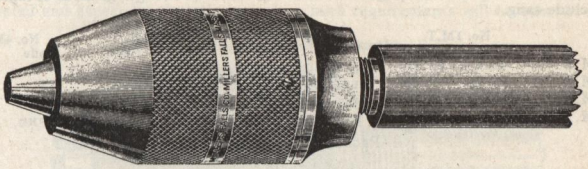
"Millers Falls" Drill Chucks

These chucks have been used for years on M. F. Hand and Breast Drills, with complete satisfaction to the user. They are fitted with or without plain round or flattened shanks and hold round shank drills within their capacity securely and with surprising accuracy for the low price at which they are sold.

They are made entirely of steel with three hardened jaws actuated by concealed springs that cannot be damaged from without. The shells are nicely knurled to give a good grip for tightening and loosening.

Manufacturers interested in chucks in large quantities for equipment purposes are requested to ask for special large quantity prices.

With Straight Round Shanks



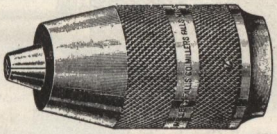
The chucks listed below are regularly equipped with ½-inch round shanks 2½ inches long. Chucks Nos. 5, 6 and 7 can be supplied with 41/64-inch shanks without additional charge when so specified. No. 7 can be furnished with ⅞-inch shank if desired.

	Capacity	Greatest Diameter	Weight	Code	Price Each
No. 4	0 to 3/16 inch	1 inch	6 ozs.	EAGER	$1.40
No. 5	0 to ¼ inch	1 inch	7 ozs.	EARLY	1.90
No. 6	0 to ⅜ inch	1¼ inches	10 ozs.	EADEL	2.25
No. 7	0 to ½ inch	1½ inches	17 ozs.	EAGLE	3.10

Furnished with flattened shank for set screw without extra charge.

Packed one in a box.

Without Shanks

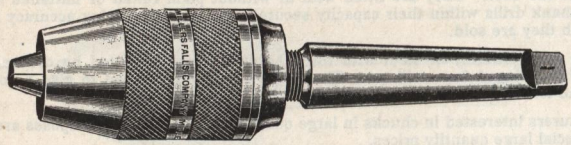


These are the same chucks listed above but without shanks.

	Capacity	Greatest Diameter	Code	Price Each
No. 4	0 to 3/16 inch	1 inch	EARED	$1.00
No. 5	0 to ¼ inch	1 inch	EARSH	1.45
No. 6	0 to ⅜ inch	1¼ inches	EASTR	1.80
No. 7	0 to ½ inch	1½ inches	EAVES	2.50

"Millers Falls" Drill Chucks

Morse Taper Shanks



These chucks are the same as Nos. 4, 5, 6 and 7, but with Taper Shanks. These shanks are accurately made and are according to Morse Standard. The length given is of taper only and does not include tang.

	No. 1M.T.		No. 2M.T.		No. 3M.T.		No. 4M.T.	
	Code	Price	Code	Price	Code	Price	Code	Price
No. 4M.T.	ECCLE	$1.95	ECHEL	$2.10				
No. 5M.T.	ECHIN	2.35	ECHOE	2.50				
No. 6M.T.	ECKLE	2.75	ECLAT	2.90	ECLEC	$3.50		
No. 7M.T.	ECLIP	3.60	ECOID	3.75	ECOLO	4.40	ECPHO	$5.25

Packed one in a box.

No. 1 Taper is 2⅛ inches long; largest diameter .475 inch; smallest diameter .369 inch.
No. 2 Taper is 2⁹⁄₁₆ inches long; largest diameter .700 inch; smallest diameter .572 inch.
No. 3 Taper is 3³⁄₁₆ inches long; largest diameter .938 inch; smallest diameter .778 inch.
No. 4 Taper is 4¹⁄₁₆ inches long; largest diameter 1.231 inch; smallest diameter 1.020 inch.

When ordering it is essential to specify the number of chuck as well as the size number of taper.

"Master" Chuck

This is the well known "Master" Chuck which has proved so popular on several series of braces and breast drills. It is of the two-jawed Universal type holding ⅛ to ½ inch round, No. 1 Morse Taper and bit shank drills. Regularly equipped with ½-inch round shank, 2½ inches long. Furnished with ¹⁵⁄₁₆-inch or ⁴¹⁄₆₄-inch shanks, if desired, without extra charge. Special or taper shanks to order. Nicely polished.

	Capacity	Weight	Code	Price Each
No. 150	As above	16 ozs.	EDICT	$2.30

Packed one in a box.

"Goodell-Pratt" Drill Chucks

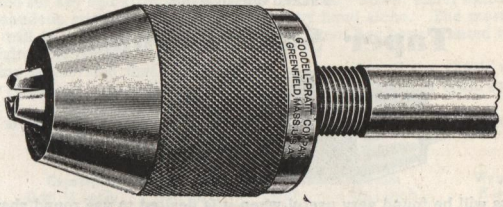
The construction of these chucks is extremely simple, strong and dependable. They have been used for thirty-five years as regular equipment on the millions of hand and breast drills we have sold in that time. Large quantities have been supplied to manufacturers as regular equipment on a wide variety of products and their performance, in every instance, has been highly satisfactory.

They are made entirely of steel with carefully hardened jaws actuated by three small coil springs. The shanks are carefully fitted to the chuck they are shipped with. This and the care used throughout in their manufacture accounts for the surprising accuracy maintained at the very low price at which they are sold.

No spanner or wrench is required. They can be easily tightened or loosened by hand. The shell is nicely knurled to afford a good grip.

Delivery of these chucks without shanks can be made for special equipment in as large quantities as wanted and especially attractive prices on such requirements will be quoted.

Straight Round Shanks

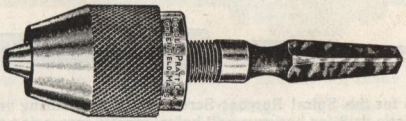


These chucks are fitted with lathe-turned ½-inch or 41/64-inch shanks. In ordering, be sure to specify which size is desired. Half-inch shanks sent unless otherwise specified.

	Capacity	Weight	Code	Price Each
No. 13½	0 to 1/16 inch	4 ozs.	WYMAM	$1.25
No. 14	0 to 5/32 inch	4 ozs.	WYMEN	1.25
No. 15	0 to ¼ inch	6 ozs.	WYNUS	1.55
No. 15½	0 to ⅜ inch	9 ozs.	WYPOS	1.90
No. 16	0 to ½ inch	14 ozs.	WYROV	2.50

Packed one in a box.

Bit Shanks



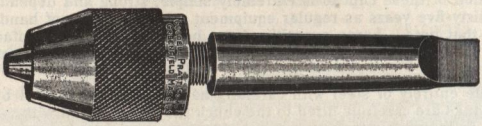
These drill chucks have bit shanks that can be held in an ordinary bit brace chuck.

	Capacity	Weight	Code	Price Each
No. 14B	0 to 5/32 inch	4 ozs.	WYMIP	$1.70
No. 15B	0 to ¼ inch	6 ozs.	WYOHL	2.00
No. 15½B	0 to ⅜ inch	9 ozs.	WYPPA	2.30
No. 16B	0 to ½ inch	14 ozs.	WYRRA	3.05

Packed one in a box.

"Goodell-Pratt" Drill Chucks

Morse Taper Shanks

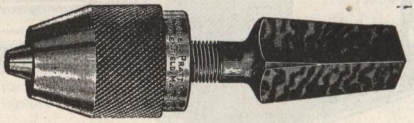


These drill chucks are provided with standard No. 1 and No. 2 Morse Taper Shanks. In ordering, please specify which size is desired.

	Capacity	Weight, Pounds No. 1 M.T.	No. 2 M.T.	Code	Price Each
No. 14M.T.	0 to 5/32 inch	1/4	3/8	WYNAN	$1.90
No. 15M.T.	0 to 1/4 inch	3/8	1/2	WYORV	2.30
No. 15½M.T.	0 to 3/8 inch	5/8	3/4	WYRIT	2.70
No. 16M.T.	0 to 1/2 inch	7/8	1	WYSET	3.55

Packed one in a box.

Taper Square Shanks



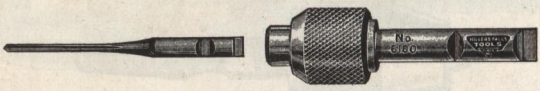
These chucks will be found very useful when it is desired to use round shank twist drills in connection with a ratchet drill. They have 3/4 x 1/2 x 1 3/4 inch square taper shanks fitting No. 2 Ratchets. The shanks are milled on centers, and carefully hardened.

	Capacity	Weight	Code	Price Each
No. 14R	0 to 5/32 inch	6 ozs.	WYMNE	$2.10
No. 15R	0 to 1/4 inch	8 ozs.	WYOLP	2.60
No. 15½R	0 to 3/8 inch	12 ozs.	WYPUT	2.85
No. 16R	0 to 1/2 inch	16 ozs.	WYRVO	4.20

Packed one in a box.

Chuck and Drills

For Spiral Ratchet Screw Drivers

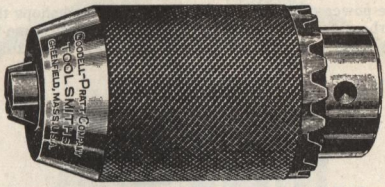


These attachments for the Spiral Ratchet Screw Drivers appearing on page 62 convert them into an efficient automatic drill for boring small holes, greatly increasing the utility of the driver. The chuck has a ball lock that holds the new style drill points securely. It has a knurled tightening nut which is nicely polished as is the shank. Eight sizes of drills, 1/16 to 11/64 inch.

	For Use with Screw Driver	Drills	Sizes	Weight	Code	Price
No. 6700	Nos. 67 and 670	3	1 to 3	2 ozs.	GAMOT	$0.55
No. 6100	Nos. 61 and 610	8	1 to 8	3 ozs.	GAMIC	1.00
No. 6200	Nos. 62 and 620	8	1 to 8	4 ozs.	GAMOX	1.00

Packed in a round wooden box.

Gear-Operated Drill Chucks



Ball Bearing, with Self-Tightening Action

Developed for production drilling, general tool room and machine shop use. They are particularly well adapted for use as regular equipment on many types of special machinery. They are accurate, strong and durable. The construction is steel throughout, with the jaws, gear ring and other parts subject to wear carefully heat-treated.

Although fitted for key operation the key is not necessary except under extraordinary circumstances, as tremendous gripping power is developed by hand alone. The more torsional strain there is on the drill and jaws the tighter they grip. A patent has been granted to cover this very desirable self-tightening feature.

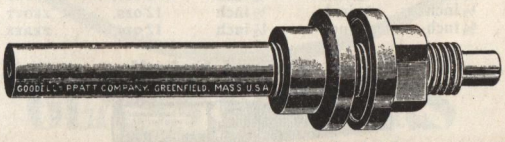
A ball bearing is provided that makes closing and opening of the chuck very smooth and easy. The key furnished with each chuck has hardened teeth and the cross handle is provided with a spanner.

The shanks are provided with taper holes, dimensions of which will be found below.

		Dimensions of Taper Holes				
	Capacity	Diameter Large End	Taper per Foot	Depth	Weight	Price Each
No. 2502	0 to ¼ inch	.388 inch	.900	13/16 inch	8 ozs.	$4.00
No. 2503	0 to ⅜ inch	.560 inch	.960	15/16 inch	16 ozs.	5.00
No. 2504	0 to ½ inch	.675 inch	.625	1 1/16 inches	24 ozs.	7.50
No. 2505	⅛ to ⅝ inch	.806 inch	.637	1 5/16 inches	28 ozs.	8.00

Packed one chuck and a key in a box.

Saw or Wheel Arbors



These polished steel arbors will be found convenient for holding saws or wheels in chucks and lathes. They are made in six sizes. The two smaller are made especially for use with electric drills of ¼-inch capacity.

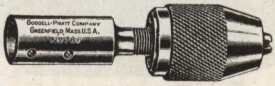
	Length	Diameter of Shank	Opening between Flanges	Diameter between Flanges	Code	Price Each
No. 748	3⅜ inches	¼ inch	½ inch	⅜ inch	ZAWEK	$0.80
No. 814	3⅜ inches	¼ inch	½ inch	½ inch	ZEJEB	.80
No. 321	4 inches	⅜ inch	½ inch	⅜ inch	YILNE	.80
No. 322	4¾ inches	½ inch	½ inch	½ inch	YILYS	.80
No. 323	7 inches	¾ inch	¾ inch	½ inch	YIMEP	1.10
No. 324	10 inches	1 inch	1 inch	¾ inch	YIMNA	2.10

Packed one in a box.

Attachments for Small Motors

With fractional horse power motors in many homes and workshops these attachments, consisting of drill chucks, arbors and taper thread spindles, greatly increase the usefulness of these motors. They are finely made and finished and will run true. All shanks fitted with two headless set screws.

Drill Chucks

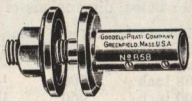


Made entirely of steel and fitted with three hardened steel jaws. Each chuck tested.

	Diameter Shaft	Capacity	Length Overall	Weight	Code	Price Each
No. 837	¼ inch	0 to 5/32 inch	1⅞ inches	2 ozs.	ZELUH	$1.60
No. 757	⅜ inch	0 to ¼ inch	3 inches	4 ozs.	ZAYON	1.70
No. 761	½ inch	0 to ⅜ inch	4¼ inches	11 ozs.	ZAZLA	1.90
No. 863	½ inch	0 to ½ inch	4⅝ inches	16 ozs.	ZEPIJ	2.30
No. 861	⅝ inch	0 to ½ inch	4⅝ inches	16 ozs.	ZEPHE	2.50

Packed one in a box.

Arbors



Ample steel flanges for holding grinding and polishing wheels, saws, etc. They can also be used to mount special size pulleys. Hardened steel tightening nut.

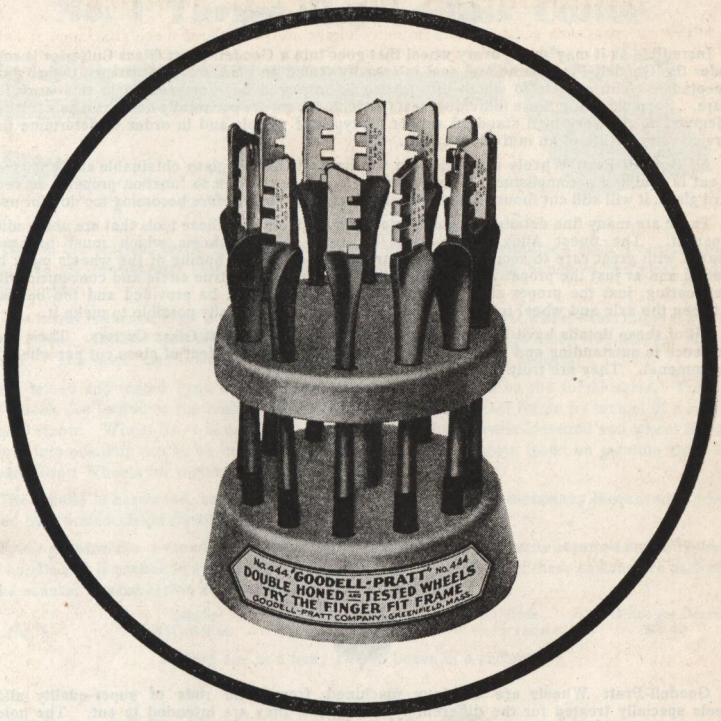
	Diameter Shaft	Flanges Open	Diameter between Flanges	Weight	Code	Price Each
No. 838	¼ inch	⅜ inch	⅜ inch	3 ozs.	ZELYJ	$2.00
No. 758	⅜ inch	½ inch	⅜ inch	5 ozs.	ZAYUP	2.10
No. 858	½ inch	¾ inch	½ inch	12 ozs.	ZEOZT	2.10
No. 868	⅝ inch	¾ inch	½ inch	12 ozs.	ZEREK	2.30

Taper Thread Spindles

Clean, deep taper threads for holding both buffing wheels and wood center wheels made for a great variety of work. Thread right hand unless marked L. H.

	Diameter Shaft	Length Overall	Weight	Code	Price Each
No. 840 L. H.	¼ inch	2¼ inches	1½ ozs.	ZEMDA	$0.60
No. 759	⅜ inch	3¼ inches	2 ozs.	ZAZAL	.80
No. 760 L. H.	⅜ inch	3¼ inches	2 ozs.	ZAZEM	.80
No. 859	½ inch	3⅜ inches	5 ozs.	ZEPAG	.80
No. 865 L. H.	½ inch	3⅜ inches	5 ozs.	ZEPOK	.90
No. 869	⅝ inch	3½ inches	5 ozs.	ZERIL	.90

Packed one in a box.


No. 444 GOODELL-PRATT No. 444
DOUBLE HONED AND TESTED WHEELS
TRY THE FINGER FIT FRAME
GOODELL-PRATT COMPANY · GREENFIELD, MASS.

GLASS CUTTERS

A really fine steel wheel glass cutter is a truly wonderful tool when the remarkable amount of useful work it will perform is taken into consideration.

The wheel, only a few thousandths of an inch in diameter, at best is a difficult part to machine, heat-treat and hone with the precision necessary for maximum performance. It is so small that products of different manufacturers all look alike to the naked eye.

Under the microscope and in the hardness testing machines, however, the reason for wide variance in performance becomes perfectly apparent.

You can assure yourself of the longest lived, easiest cutting wheels by insisting that your cutters bear the Goodell-Pratt name.

GREENFIELD, MASSACHUSETTS

Glass Cutters

Incredible as it may seem, every wheel that goes into a Goodell-Pratt Glass Cutter or is sold under the Goodell-Pratt name and seal is actually tested on glass for performance before final acceptance. The experts to whom this testing is entrusted have specialized in this work for years. Supplementing these individual tests, machine tests are constantly being run as a further safeguard to the very high standard set for all types of wheels and in order to determine the service value or life of an individual cutter.

All Goodell-Pratt Wheels are tested on the hardest window glass obtainable and 3,000 feet of cut is common accomplishment, and after the cutter is too dull to function properly on very hard glass, it will still cut thousands of feet of soft surface glass before becoming too dull for use.

There are many fine details that enter into the manufacture of these tools that are not readily apparent. The finest Alloy Steels must be used in the wheels, which must be heat-treated with great care to secure uniform hardness and temper, honing of the wheels must be precise and at just the proper angle, the cutting edge must be a true circle and concentric with the bearing, just the proper side clearance for the wheel must be provided and the bearing between the axle and wheel must be as perfect as it is commercially possible to make it.

All of these details have been highly perfected in Goodell-Pratt Glass Cutters. Their performance is outstanding and their low cost of operation figured in feet of glass cut per wheel is phenomenal. They are truly "World Famous."

Tested Wheels

Goodell-Pratt Wheels are carefully machined from solid rods of super-quality alloy steels specially treated for the different types of glass they are intended to cut. The holes are drilled and reamed to exact size to insure just the proper clearance when mounted on the cutter axles to give free turning which is absolutely essential to the best performance.

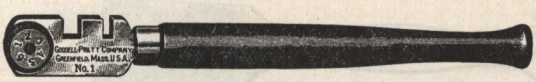
The heat-treatment is the result of over forty years' experience and research. The process is extremely sensitive and controlled within very close limits, insuring a uniformly high grade product.

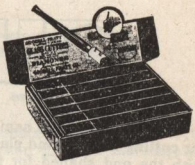
After being hardened and tempered, the wheels are honed in oil with the utmost care on exceedingly fine India wheels to the critical angle that gives the easiest cut, cleanest break and the longest life for the grade of glass they are intended to cut. Furthermore, this honing operation must leave the wheel perfectly round and concentric with the hole so that it rolls freely on the glass.

Four different types of wheels are used.

Type	Color	Fitting Cutters Nos.	Price per Dozen
C	Red Seal	1-400-2-478-354-224-301	$0.75
D	Blue Seal	337-979-444-850-95	1.20
E	Green Seal	879	1.20
F	Black Seal	218-202	.75

No. 1 Turret Head Glass Cutter





This is the original turret head cutter that has earned and maintained such a remarkable reputation for consistently high grade, low cost performance in the hands of the glass trade of the world.

The turret is turned from a solid bar of selected steel with the six wheel axles integral parts of the turret. Infinite care is taken in the heat-treatment so that the axles will outwear many wheels. The turret and turret screw is rust-proofed by the Udelyte process.

Six honed and tested Type C "Red Seal" Wheels are mounted on the turret axles. Turret and wheels are locked to the highly polished and nickel-plated steel frame by means of a rust-proofed screw. Wheel No. 1 is used until worn out, then the screw is loosened and wheel No. 2 rotated into position and so on until all six have been used. Always insist on genuine Type C Goodell-Pratt Wheels for replacements.

The handle is hardwood, comfortably shaped, nicely finished in mahogany lacquer and protected by a buffed nickel ferrule

Every genuine No. 1 Goodell-Pratt Turret Head Cutter has the name stamped on the frame and handle and is packed in a distinctive three-color carton. Twelve of these cartons are packed in the counter display carton shown above

	Length	Weight per Dozen	Code	Price per Dozen
No. 1	5¾ inches	14 ozs.	WYBCE	$4.40

Packed one in a box; twelve boxes in a carton

No. 400 Turret Head Glass Cutter

Similar to No. 1, but with one dozen "Red Seal" Wheels. Six of these are in the rust-proofed turret ready for use and the other six in a screw-locked magazine in the frame.

The end of the mahogany lacquered handle is equipped with a steel breaker ball. The steel frame and breaker ball are nicely polished and nickeled.

	Length	Weight per Dozen	Code	Price per Dozen
No. 400	5¾ inches	1 lb.	YOGEN	$7.80

Packed one in a box; twelve boxes in a carton.

No. 2 Turret Head Glass Cutter

Equipped with the same rust-proofed turret as No. 1, carrying six Type C "Red Seal" Wheels for cutting window and plate glass. The frame and handle are a unit made of one piece of metal with the end shaped for use as a putty knife. The putty knife and head are nicely polished while the handle portion is red enameled.

	Length	Weight per Dozen	Code	Price per Dozen
No. 2	5½ inches	1⅜ lbs.	WYCED	$5.00

Packed one dozen in a box.

No. 850 Glass Cutter

The best cutter ever designed for the manufacturer, jobber and fabricator of large quantities of glass who prefer the single wheel to the turret type.

The wheel and axle are carried on a rust-proofed, tempered steel fixture. When a worn wheel is to be replaced, the fixture is pushed forward with the thumb exposing the wheel which can be tipped off, a new wheel slipped on to the axle and the fixture returned to its original position which gives the axle a positive bearing in the frame. Each equipped with a tested Type D Wheel for all grades of flat and plate glass. Type E Wheels can be used if desired. Frame and ferrule nicely polished and nickeled. Handle mahogany lacquered hardwood.

	Length	Weight per Dozen	Code	Price per Dozen
No. 850	5½ inches	10 ozs.	ZENZO	$2.50

Packed one cutter in a carton; one dozen cartons in a box.

No. 950 Glass Cutter

With Extra Wheel Magazine

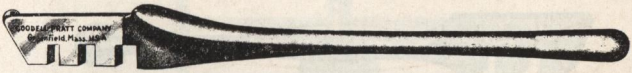
The quick wheel interchangeability and the long lived frame of the No. 850 have been supplemented in this cutter by a convenient magazine in the end of the handle holding six extra wheels for replacements.

Unique wheel and axle fixture, rust-proofed tempered steel. Frame and ferrule nicely polished and nickeled. Handle mahogany lacquered hardwood. Each cutter equipped with seven tested Type D Wheels for all grades of flat and plate glass.

	Length	Weight per Dozen	Code	Price per Dozen
No. 950	5⅝ inches	11 ozs.	ZIGPA	$4.80

Packed one in a carton; one dozen cartons in a box.

No. 444 Single Wheel Glass Cutter



The Dealer Display Fixture on Page 127 FREE with first order for 2 dozen No. 444 Glass Cutters

A new addition to the line that is destined to be one of the most popular due to the perfect finger fitting form of the handle. It drops naturally into position between the first two fingers and can be used for hours without fatigue or discomfort.

It is equipped with a tested Type D "Blue Seal" Wheel set in a well polished frame with three breaker notches. The finger-fit handle is finished in bright blue lacquer with red tip.

	Length	Weight per Dozen	Code	Price per Dozen
No. 444	5¼ inches	1⅜ lbs.	YOMVE	$2.00

Packed one in a carton; one dozen cartons in a box.

No. 879 Green Tip Glass Cutter

For Art and Cathedral Glass

A single wheel cutter with an all-metal frame and handle equipped with a tested Type E "Green Seal" Wheel specially hardened, tempered and honed for cutting opalescent, art, cathedral and other very hard grades of art glass.

The well polished frame has three breaker notches. The handle is comfortably shaped and finished in black lacquer with a distinctive green tip.

Each cutter equipped with a tested Type E Wheel.

	Length	Weight per Dozen	Code	Price per Dozen
No. 879	5⅜ inches	1⅜ lbs.	ZILAM	$2.00

Packed one dozen in a box.

No. 979 Red Tip Glass Cutter

For Flat and Plate Glass

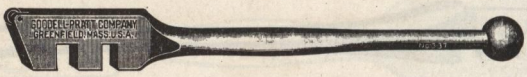
The standard type single wheel cutter for general use on these grades of glass. It is equipped with a tested Type D "Blue Seal" Wheel set in a polished frame with three breaker notches. The handle is comfortably shaped and nicely black lacquered, with a distinctive red tip.

It is furnished with one-half or one full dozen mounted on attractive counter cards, which have proved effective merchandisers, or packed in individual cartons. Length, 5⅜ inches.

		Weight	Code	Price
No. 979	Counter Display of 6	¾ lb.	ZIKUT	$1.10
No. 979	Counter Display of 12	1⅜ lbs.	ZIKYR	2.15
No. 979	Per Dozen in Cartons	1⅜ lbs.	ZILAH	2.00

One display in an envelope or one dozen cartons in a box.

No. 337 Single Wheel Glass Cutter



A comfortable, well balanced cutter equipped with a breaker ball on the end of the handle of sufficient weight to get good results.

It is equipped with a tested Type D "Blue Seal" Wheel set in the well polished frame with three standard notches. The handle is finished in black and breaker ball in red lacquer.

	Length	Weight per Dozen	Code	Price per Dozen
No. 337	5 inches	1½ lbs.	YIRUX	$2.00

Packed one in a carton; one dozen cartons in a box.

No. 218 Gauge Glass Cutter

The most practical tool ever designed for cutting the gauge glass ordinarily used in steam and hot water boilers.

Owing to the very hard glass used in these gauges, this cutter is supplied with a tested special Type F "Black Seal" Wheel which is set at the end of a graduated steel beam and cuts from the inside, giving a good clean break. The wheels are easily replaced. The length of glass cut off is determined by setting the sliding gauge on the graduated arm. The second steel beam merely counterbalances the cutting pressure on the outside wall of the tube. The steel beams are nicely polished and nickeled. Handles finished in red and black lacquer.

	Length	Weight	Code	Price Each
No. 218	12½ inches	¾ lbs.	YERRO	$1.60

Packed one in a box.

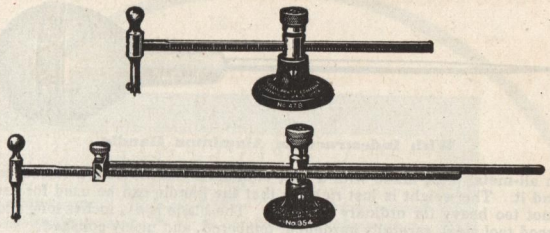
No. 202 Gauge Glass Cutter

For cutting glass tubes up to 8 inches. Rod easily adjustable by thumb nut. Removable axle on cutting head. Equipped with Type F "Black Seal" Wheel. Magazine in end of mahogany finished handle holds five extra wheels. Rod nicely polished steel.

	Length	Weight	Code	Price Each
No. 202	9 inches	1½ lbs.	KALKI	$0.90

Packed six in a box.

Circular Glass Cutters



Circles or arcs of circles from 2 to 12, 2 to 24, or 2 to 48 inches in diameter are quickly and accurately cut with these tools. The 48-inch capacity cutter is equipped with a double beam.

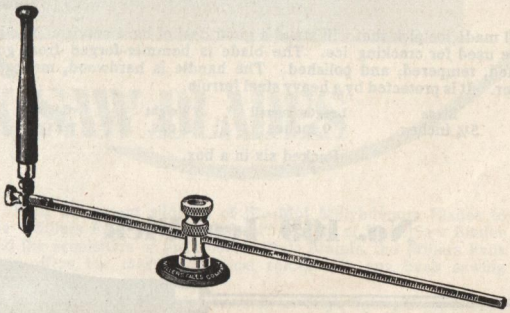
They are equipped with tested Type C "Red Seal" Wheels set in a head at the end of a graduated beam. Wheels can be replaced very easily. The beam pivots freely in the metal standard so that the complete circle can be cut in one continuous sweep. To free the circle without breakage six or more tangents should be cut with a straight cutter.

The standard, finished in bright red lacquer, has a rubber base to prevent slipping.

	Capacity	Weight per Dozen	Code	Price Each
No. 478	2 to 12 inches	½ lb.	YOSAZ	$1.20
No. 224	2 to 24 inches	⅝ lb.	YESRE	1.50
No. 354	2 to 48 inches	¾ lb.	YIVYE	2.00

Packed one in a box.

No. 301 Circular Glass Cutter



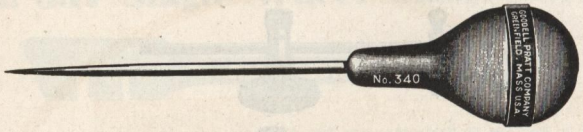
The cutting end of this dual purpose cutter is one of our regular turret head cutters with six honed and tested Type C "Red Seal" Wheels fixed to the end of a graduated beam by means of a knurled thumb screw. The cutter can be used as an ordinary cutter by unscrewing this screw and removing from the beam. Standard has a cork disc inserted in the bottom to prevent slipping.

All exposed steel parts polished and nickel plated.

	Capacity	Weight per Dozen	Code	Price Each
No. 301	2 to 24 inches	½ lb.	KALIF	$1.30

Packed one in a box.

No. 340 Ice Pick



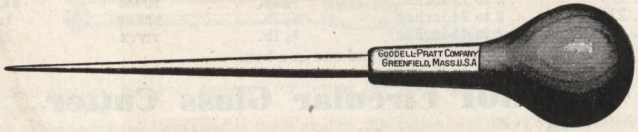
With Indestructible Aluminum Handle

This is an all-metal pick, made with a cast aluminum handle with a raised polished band running around it. The weight is just right so that the handle can be used for easily cracking ice and still not too heavy for ordinary chipping. The blade is 4¼ inches long and is hammer-forged from good tool steel, carefully hardened, tempered, and nicely polished.

	Blade	Length Overall	Weight	Code	Price per Dozen
No. 340	4¼ inches	7 inches	4 ozs.	YISAW	$4.80

Packed six in a box.

No. 339 Ice Pick

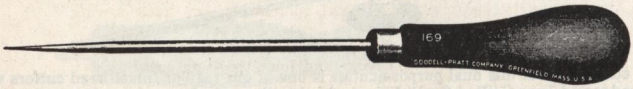


A strong, well made ice pick that will stand a great deal of hard service. The handle is large so that it may be used for cracking ice. The blade is hammer-forged from good tool steel, carefully hardened, tempered, and polished. The handle is hardwood, mahogany finish, 1¾ inches in diameter. It is protected by a heavy steel ferrule.

	Blade	Length Overall	Weight	Code	Price per Dozen
No. 339	5¼ inches	9 inches	3 ozs.	YIRZY	$3.00

Packed six in a box.

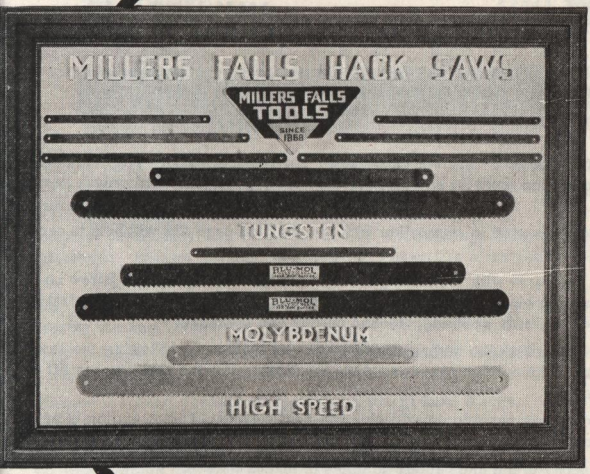
No. 169 Ice Pick



This is a long, slim ice pick of the style generally preferred by ice men. It has a good steel blade, well tapered, tempered, and polished. The handle is made of hardwood, enameled to render it as near moisture-proof as possible, and protected by a nickel-plated ferrule.

	Blade	Length Overall	Weight	Code	Price per Dozen
No. 169	5¾ inches	9¾ inches	2 ozs.	YEHAD	$2.20

Packed twelve in a box.



HACK SAW BLADES

With the recent addition of Blu-Mol Molybdenum Blades to the "Millers Falls" and "Universal" Brands of Hack Saw Blades and the acquisition of the Goodell-Pratt Brands, the Millers Falls Line offers the most economical solution to any hack sawing problem.

Whether Tungsten, Molybdenum or High Speed Steel Blades will give the greatest efficiency and lowest cutting costs on any particular job can be readily determined.

A corp of experts familiar with every phase of metal sawing through years of experience and constant contacts is available through Millers Falls distributors.

We urge distributors and users alike to avail themselves of this worthwhile service and to get a first hand knowledge of the wonderful performance of the Blu-Mol Molybdenum Blade.

All Hard Tungsten Hand Hack Saw Blades

MILLERS FALLS TOOLS

UNIVERSAL

These blades are made in both "Millers Falls" and "Universal" Brands. They are recommended for general all-around work in hand frames and are always furnished unless flexible are specified.

The following suggestions used in connection with the chart on page 138 will help to secure the best performance.

Insert the blade in the frame with the teeth pointing away from the operator. Screw up the tensioning device so that the blade is strained tightly. Repeat this operation after the first few strokes. Proper tension prevents wobbling, crooked cutting and breakage.

Bear down on the forward stroke sufficiently to make the teeth cut. Allowing the saw to slide over the work glazes the cutting edges and dulls the teeth. For the same reason lift the blade on the return stroke.

Thirty-five to forty strokes per minute will give the best results. Faster cutting is apt to draw the temper and ruin the blade.

All orders should specify brand and catalog numbers of blades wanted.

Made of 23 Gauge — .025 Inch Thick Steel

No.	Length Inches	Teeth per Inch	Width Inch	Weight per Gross Pounds	Code "Millers Falls"	Code "Universal"	Price per Gross
11	8	18	7/16	3½	HAIRS	HUMBLE	$8.00
21	8	24	7/16	3½	HANUM	HUNKS	8.00
31	8	32	7/16	3½	HAROT	HURLY	8.00
3	10	14	½	5	HABLE	HUFFY	10.00
13	10	18	½	5	HAMER	HUMID	10.00
23	10	24	½	5	HAPPY	HURAS	10.00
33	10	32	½	5	HARPA	HURRA	10.00
5A	12	14	½	6½	HARPI	HUSTY	12.00
15A	12	18	½	6½	HARPO	HUSUH	12.00
25A	12	24	½	6½	HARRE	HUSUZ	12.00
35A	12	32	½	6½	HARSH	HUSSA	12.00
5	12	14	9/16	6¾	HADST	HULKI	13.50
15	12	18	9/16	6¾	HANCE	HUMUS	13.50
25	12	24	9/16	6¾	HAREM	HURKA	13.50
35	12	32	9/16	6¾	HARES	HURLO	13.50

Packed one-half gross in a box.

Flexible Tungsten Hand Hack Saw Blades

Flexible blades are made in both "Millers Falls" and "Universal" Brands. They differ from all hard blades in that the teeth only are hardened, the backs being left soft and consequently unbreakable.

They are particularly well suited for use by electricians, automotive mechanics, steamfitters and plumbers. Also for work in out-of-the-way places and when the work is not firmly held in a vise.

The special suggestions that follow, used in connection with the chart on page 138, will aid in securing the best results.

Flexible blades should be used under greater tension than all hard blades. They stretch more easily than all hard blades and consequently they should be tightened frequently in use.

Observe the same stroking suggestions as for all hard blades. When starting a new blade in an old cut, give the work a quarter turn if possible. This will obviate binding due to the wider set of the new blade.

All orders should specify brand and catalog numbers of blades wanted.

Made of 23 Gauge — .025 Inch Thick Steel

No.	Length Inches	Teeth per Inch	Width Inch	Weight per Gross Pounds	Code "Millers Falls"	Code "Universal"	Price per Gross
51	8	18	7/16	3½	HEAVE	HYALI	$8.00
61	8	24	7/16	3½	HELIX	HYDOT	8.00
71	8	32	7/16	3½	HENCE	HYGRO	8.00
43	10	14	½	5	HEARD	HUZZA	10.00
53	10	18	½	5	HECTO	HYBOD	10.00
63	10	24	½	5	HELVE	HYENA	10.00
73	10	32	½	5	HEPTA	HYLEG	10.00
45A	12	14	½	6½	HEATH	HYADE	12.00
55A	12	18	½	6½	HELIO	HYDAG	12.00
65A	12	24	½	6½	HEMOR	HYGEL	12.00
75A	12	32	½	6½	HERSE	HYLOT	12.00
45	12	14	9/16	6¾	HESAL	HYRAK	13.50
55	12	18	9/16	6¾	HESEI	HYRIT	13.50
65	12	24	9/16	6¾	HESOR	HYROS	13.50
75	12	32	9/16	6¾	HESUT	HYRUM	13.50

Packed one-half gross in a box.

Tungsten Hack Saw Chart

In order to obtain the maximum efficiency from a hack saw blade, and the lowest possible sawing cost, it is imperative that the proper saw is used. In hand blades the number of teeth per inch is the chief consideration; in power blades the width and gauge also are essential factors.

The chart below designates the correct blade to use on any given material. Compiled from actual tests made in our own plant and will, if followed, reduce direct sawing costs as well as the cost of saws.

Hand Blades — Specify Brand and Number

Length in Inches	Width in Inches	ALL HARD: Brass, Copper, Soft Steel, Cast Iron, Aluminum — 14 Teeth	ALL HARD: Iron Pipe, Tool Steel, Light Angle Iron — 18 Teeth	ALL HARD: Drill Rod, Medium Tubing, Sheet Metals — 24 Teeth	ALL HARD: Thin Tubing, Electric Casings, Thin Sheet Metals — 32 Teeth	FLEXIBLE: Brass, Copper, Soft Steel, Cast Iron, Aluminum — 14 Teeth	FLEXIBLE: Iron Pipe, Tool Steel, Light Angle Iron — 18 Teeth	FLEXIBLE: Drill Rod, Medium Tubing, Sheet Metals — 24 Teeth	FLEXIBLE: Thin Tubing, Electric Casings, Thin Sheet Metals — 32 Teeth
8	7/16		No. 11	No. 21	No. 31		No. 51	No. 61	No. 71
10	1/2	No. 3	No. 13	No. 23	No. 33	No. 43	No. 53	No. 63	No. 73
12	1/2	No. 5A	No. 15A	No. 25A	No. 35A	No. 45A	No. 55A	No. 65A	No. 75A
12	9/16	No. 5	No. 15	No. 25	No. 35	No. 45	No. 55	No. 65	No. 75

Power Blades — Specify Brand and Number

Length in Inches	For Light Power Machines, 21 Ga.—.032 x 5/8" or 3/4" — Annealed Tool Steel, Soft Steel — 14 Teeth	For Medium Power Machines, 18 Ga.—.049 x 3/4" — Heavy Angle Iron, Iron Pipe, Cast Iron — 10 Teeth	For Medium Power Machines, 18 Ga.—.049 x 3/4" — Tool Steel, Hard Metals — 14 Teeth	For Heavy Power Machines, 18 Ga.—.049 x 1" — Soft Steel, Annealed Tool Steel, Brass, Copper — 10 Teeth	For Heavy Power Machines, 18 Ga.—.049 x 1" — Steel Tubing Tool Steel Light Angle Iron — 14 Teeth	For Extra Heavy Power Machines, 16 Ga.—.065" x 1 1/4" or 1 1/2" — Soft Steel, Large Work — 4 Teeth	For Extra Heavy Power Machines, 16 Ga.—.065" x 1 1/4" or 1 1/2" — Machinery Steel, Steel Rails — 6 Teeth	For Extra Heavy Power Machines, 16 Ga.—.065" x 1 1/4" or 1 1/2" — Tool Steel, Angle Iron, Small Work — 10 Teeth
12	No. 120	No. 121	No. 122	No. 123	No. 124	.....	.....	.....
12	No. 125	.....	.....	.....	.....	.....	.....	.....
12	No. 126*	.....	.....	.....	.....	.....	.....	.....
12	No. 127*	.....	.....	.....	.....	.....	.....	.....
14	.....	No. 141	No. 142	No. 143	No. 144	No. 146	No. 147	No. 148
17	.....	.....	.....	No. 171	No. 172	No. 174	No. 175	No. 176
18	.....	.....	.....	.....	.....	.....	No. 185	No. 184
21	.....	.....	.....	.....	.....	No. 212	No. 213	No. 214
24	.....	.....	.....	.....	.....	.....	No. 242	No. 244

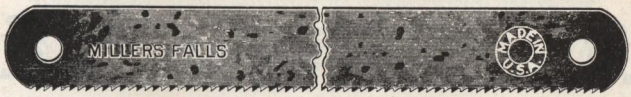
The above numbers apply to "Millers Falls" and "Universal" blades as well.

*Has 18 teeth. Adapted especially for Thin Sections and Hard Tool Steel.

Tungsten Power Hack Saws

UNIVERSAL

MILLERS FALLS TOOLS SINCE 1868



Tungsten Power Blades are made in both "Millers Falls" and "Universal" Brands. The use of good cutting solutions and proper selection of blade are highly important for maximum performance. Pressure on the saw and rigidity of work are likewise important. When cutting dry on light machines, 50 strokes per minute are recommended; on medium and heavy machines with cutting solution 100 S.P.M. for soft steel and wrought iron; 70 to 80 S.P.M. for hard tool or annealed steel. Do not cut unannealed steel.

All orders should specify brand and catalog numbers of blades wanted.

No.	Length Inches	Teeth per Inch	Width Inches	Thickness Gauge	Weight per Gross Pounds	Code "Millers Falls"	Code "Universal"	Price per Gross
100	10	10	¾	.049-18	15½	HIBER	HYOSE	$20.40
120	12	14	¾	.032-21	11½	HICUP	HYODO	19.44
127	12	18	¾	.032-21	11½	HICOL	HYOID	19.44
121	12	10	¾	.049-18	17¾	HIDEN	HYPAL	24.48
122	12	14	¾	.049-18	17¾	HIERO	HYPER	24.48
123	12	10	1	.049-18	23	HIFER	HYPNE	32.64
124	12	14	1	.049-18	23	HIGRE	HYPID	32.64
125	12	14	⅝	.032-21	10	HINGE	HYMEN	16.20
126	12	18	⅝	.032-21	10	HILLY	HYMNO	16.20
141	14	10	¾	.049-18	20	HINDI	HYPNO	28.56
142	14	14	¾	.049-18	20	HIPPA	HYPKI	28.56
143	14	10	1	.049-18	23½	HIRER	HYPOB	38.08
144	14	14	1	.049-18	23½	HISTO	HYPCO	38.08
146	14	4	1¼	.065-16	36	HIROS	HPENT	58.80
147	14	6	1¼	.065-16	36	HIWIE	HPAST	58.80
148	14	10	1¼	.065-16	36	HITCH	HPORE	58.80
171	17	10	1	.049-18	33	HIXOT	HPUTE	46.24
172	17	14	1	.049-18	33	HOBIT	HYSON	46.24
174	17	4	1¼	.065-16	45	HEDER	HPELT	71.40
175	17	6	1¼	.065-16	45	HOSTS	HPAFA	71.40
176	17	10	1¼	.065-16	45	HOCCO	HPALK	71.40
185	18	6	1¼	.065-16	58½	HOWES	HPSEN	75.60
184	18	10	1¼	.065-16	58½	HOVEN	HPOOL	75.60
212	21	4	1½	.065-16	72	HUVER	HPARN	105.84
213	21	6	1½	.065-16	72	HUPPS	HPECK	105.84
214	21	10	1½	.065-16	72	HURON	HPOVE	105.84
242	24	6	1½	.065-16	96	HELWE	HPOST	120.96
244	24	10	1½	.065-16	96	HUTUM	HPEXT	120.96

No. 21 Gauge blades packed one-half gross in a box. No. 18 Gauge, 10 inches and 12 inches by ¾ inch, one-third gross. No. 18 Gauge, 14 inches by ¾ inch, one-fourth gross. Nos. 18 Gauge and 16 Gauge, by 1 inch, one-fourth gross. Nos. 18 Gauge and 16 Gauge, over 1 inch, one-twelvth gross.

Goodell-Pratt Hack Saw Blades

GP 888 — **All Hard**

Trade Marks Registered
U. S. Patent Office and Other Countries

Tungsten Alloy Steel

GP 777 — **Flexible**

Through their excellent quality and fine performance these blades have made an enviable reputation for themselves in every market in the world. Their ability to cut fast and their long life reduce hack-sawing costs to the minimum. They are made of a special analysis tungsten alloy steel individually heat-treated in automatically controlled electric furnaces.

GP 888 All-Hard Blades. Recommended for all work at the bench. In spite of their hardness a surprising amount of flexibility is secured which contributes materially to their popularity as an all-round, general purpose blade of outstanding merit.

Every step in their manufacture is subject to the same standards and critical inspections as our other brands of blades. They are continually under test to insure the fast cutting qualities and long life for which they are known.

GP 777 Flexible Blades. For many kinds of work a flexible blade, one that will not break when subjected to severe twists and side strains, is more economical and satisfactory than an all-hard blade. They are particularly well suited to the electrical and plumbing fields.

Made of 23 Gauge—.025 Thickness Steel

Length Inches	Width Inches	Pitch Teeth per Inch	Weight per Gross Pounds	Code GP/888	Code GP/777	Price per Gross
8	7/16	14	3½	ZETRY	ZEBAR	$8.00
8	7/16	18	3½	ZEVMA	ZEBYX	8.00
8	7/16	24	3½	ZEWAN	ZECTE	8.00
8	7/16	32	3½	ZEWPE	ZEDEV	8.00
10	½	14	5	ZEVAM	ZEBOV	10.00
10	½	18	5	ZEVSY	ZECET	10.00
10	½	24	5	ZEWNA	ZECWO	10.00
10	½	32	5	ZEWTY	ZEDTA	10.00
12	½	14	6½	ZEVIP	ZEBVO	12.00
12	½	18	6½	ZEVYS	ZECSA	12.00
12	½	24	6½	ZEWOR	ZEDAT	12.00
12	½	32	6½	ZEWUS	ZEDUZ	12.00
12	9/16	14	6¾	ZEVIR	ZEBVT	13.50
12	9/16	18	6¾	ZEVYV	ZECSO	13.50
12	9/16	24	6¾	ZEWOT	ZEDAW	13.50
12	9/16	32	6¾	ZEWUX	ZEDVA	13.50

Packed one-half gross in a box.

Goodell-Pratt Hack Saw Blades

Trade Mark Registered
U. S. Patent Office and Other Countries

A high quality of tungsten alloy steel and painstaking methods of manufacture go into Ⓖ Brand Power Saw Blades.

The Ⓖ stamped on these blades is proof of their quality.

Unless otherwise specified the finest pitch will always be supplied.

Length Inches	Pitch Teeth Per Inch	Width Inches	Thickness Gauge	Weight per Gross Pounds	Code	Price per Gross
10	10	¾	.049-18	15½	ZUPWE	$20.40
12	14	⅝	.032-21	10	ZUPCY	16.20
12	18	⅝	.032-21	10	ZUPIX	16.20
12	14	¾	.032-21	11½	ZUPUB	19.44
12	18	¾	.032-21	11½	ZUPVA	19.44
12	10	¾	.049-18	17¾	ZURAY	24.48
12	14	¾	.049-18	17¾	ZUREX	24.48
12	10	1	.049-18	23	ZURID	32.64
12	14	1	.049-18	23	ZUROC	32.64
14	10	¾	.049-18	20	ZURUD	28.56
14	14	¾	.049-18	20	ZURZE	28.56
14	10	1	.049-18	23½	ZUSAZ	38.08
14	14	1	.049-18	23½	ZUSBE	38.08
14	4	1¼	.065-16	36	ZUSCA	58.80
14	6	1¼	.065-16	36	ZUSEB	58.80
14	10	1¼	.065-16	36	ZUSIC	58.80
17	10	1	.049-18	33	ZUSZA	46.24
17	14	1	.049-18	33	ZUTAB	46.24
17	4	1¼	.065-16	45	ZUTGT	71.40
17	6	1¼	.065-16	45	ZUTHY	71.40
17	10	1¼	.065-16	45	ZUTID	71.40
18	6	1¼	.065-16	58½	ZUVAC	75.60
18	10	1¼	.065-16	58½	ZUVCA	75.60
21	4	1½	.065-16	72	ZUVDO	105.84
21	6	1½	.065-16	72	ZUVED	105.84
21	10	1½	.065-16	72	ZUVGO	105.84
24	6	1½	.065-16	96	ZUVJY	120.96
24	10	1½	.065-16	96	ZUVOG	120.96

No. 21 Gauge blades packed one-half gross in a box; No. 18 Gauge, 10 inches and 12 inches by ¾ inch, one-third gross; No. 18 Gauge, 14 inches by ¾ inch, one-fourth gross; Nos. 18 Gauge and 16 Gauge, by 1 inch, one-fourth gross; Nos. 18 Gauge and 16 Gauge, over 1 inch, one-twelfth gross.

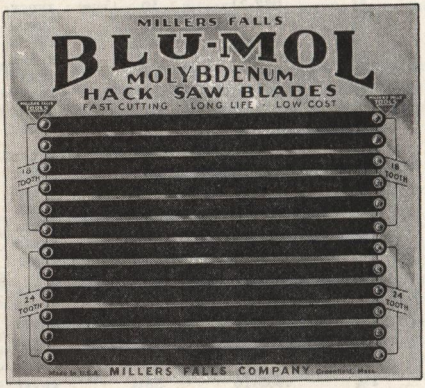
BLU-MOL
MOLYBDENUM
HACK SAW BLADES

Blu-Mol Blades, a new Millers Falls product, are made of special analysis molybdenum alloy steel developed by the country's leading research laboratories. The rapid progress made in the perfecting of molybdenum steels is attributable largely to the interest and cooperation of the U. S. Government.

The performance of molybdenum steel is dependent to an unusual degree on the methods and exactness used in its heat-treatment. The treatment of Blu-Mol Blades was determined only after extensive experiments and exhaustive tests had pointed out the precise procedure necessary to produce maximum performance and durability.

These tests run on tungsten, chrome nickel and ordinary steels at high speeds proved Blu-Mol superiority beyond any doubt. Their outstanding performance approaches that of the best high speed steel blades. Their low cost, fast cutting ability and long life insure the user the lowest cost per cut of any blade ever produced.

Blu-Mol Blades set an entirely new standard for hack sawing efficiency. An unbiased test on your own work by your own operators will substantiate this broad claim to your entire satisfaction and profit.



A sales stimulating counter display of twelve 10-inch Blu-Mol molybdenum blades, ½ dozen No. 1018 M with 18 teeth per inch and ½ dozen No. 1024 M with 24 teeth per inch.

The card is attractively designed and printed in gold, red and blue on heavy stock and is supplied with a sturdy double easel, making a very substantial fixture.

The blades are affixed with split brass stationary binders and are easily removed.

		Weight	Code	Price Each
No. 2000 M	Display Complete	¾ lb.	ZOOLU	$3.34

Packed one display in a heavy envelope.

BLU-MOL MOLYBDENUM HACK SAW BLADES

Blu-Mol Molybdenum Hand and Power Blades are made under both the "Millers Falls" and "Universal" Brands. The use of the proper cutting solution and the correct selection of width, thickness, pitch and speed of blade are essential to maximum performance. We recommend consultation on these specifications. In general 140 strokes per minute are recommended with about 80 pounds pressure on the saw, equivalent to 40 pounds at the handle used for lifting the saw.

UNIVERSAL

MILLERS FALLS TOOLS SINCE 1868

Hand Blades Specify Brand and Number

No.	Length Inches	Pitch Teeth per Inch	Width Inches	Thickness Gauge	Weight per Gross Pounds	Code "Millers Falls"	Code "Universal"	Price per Gross
1018M	10	18	½	.025-23	5	ZUPAW	ZODFA	$40.00
1024M	10	24	½	.025-23	5	ZUPBA	ZODGE	40.00
1032M	10	32	½	.025-23	5	ZUPCE	ZODJA	40.00
1214M	12	14	½	.025-23	6⅛	ZUPDI	ZODLO	48.00
1218M	12	18	½	.025-23	6⅛	ZUPEO	ZODOG	48.00
1224M	12	24	½	.025-23	6⅛	ZUPFU	ZODUM	48.00
1232M	12	32	½	.025-23	6⅛	ZUPGY	ZODYR	48.00

Power Machine Blades Specify Brand and Number

No.	Length Inches	Pitch Teeth per Inch	Width Inches	Thickness Gauge	Weight per Gross Pounds	Code "Millers Falls"	Code "Universal"	Price per Gross
2414M	12	14	1	.049-18	24½	ZUPHA	ZOEAS	$120.96
2406M	12	6	1	.065-16	30	ZUPIO	ZOECF	120.96
2410M	12	10	1	.065-16	30	ZUPJY	ZOEJL	120.96
4414M	14	14	1	.049-18	27½	ZUPKE	ZOELO	141.12
4406M	14	6	1	.065-16	34	ZUPLO	ZOEMP	141.12
4410M	14	10	1	.065-16	34	ZUPLY	ZOERT	141.12
4504M	14	4	1¼	.065-16	46	ZUPMA	ZOEVA	176.40
4506M	14	6	1¼	.065-16	46	ZUPME	ZOEWY	176.40
4510M	14	10	1¼	.065-16	46	ZUPNI	ZOFAG	176.40
7414M	17	14	1	.049-18	33	ZUPNO	ZOFGA	171.36
7406M	17	6	1	.065-16	41½	ZUPOO	ZOFHE	171.36
7410M	17	10	1	.065-16	41½	ZUPOY	ZOFIJ	171.36
7504M	17	4	1¼	.065-16	58	ZUPPA	ZOFKO	214.20
7506M	17	6	1¼	.065-16	58	ZUPPO	ZOFME	214.20
7510M	17	10	1¼	.065-16	58	ZUPRA	ZOFNL	214.20
8410M	18	10	1	.065-16	44½	ZUPRE	ZOFOC	181.44
8504M	18	4	1¼	.065-16	62	ZUPSI	ZOFUD	226.80
8506M	18	6	1¼	.065-16	62	ZUPSO	ZOGAH	226.80
8510M	18	10	1¼	.065-16	62	ZUPSY	ZUGAL	226.80
1604M	21	4	1½	.065-16	90	ZUPTA	ZOGHA	317.52
1606M	21	6	1½	.065-16	90	ZUPTY	ZOGIK	317.52
1610M	21	10	1½	.065-16	90	ZUPUZ	ZOGJE	317.52
4606M	24	6	1½	.065-16	102	ZUPVY	ZOGLO	362.88
4610M	24	10	1½	.065-16	102	ZUPWE	ZOGNY	362.88

High Speed Steel Hack Saws

MILLERS FALLS TOOLS SINCE 1868

UNIVERSAL

Developed for fast cutting of very hard carbon tool steels, chrome nickel, high speed and other alloy steels and monel metal, nichrome, etc. The life is much longer than any tungsten blade and the cutting speed far faster, making them more economical on many production jobs in spite of their greater first cost. Selection of the best width, thickness, pitch and speed of blade for a particular job is most important, as is the use of a cutting solution. Consult us for recommendations.

Made in both "Millers Falls" and "Universal" Brands.

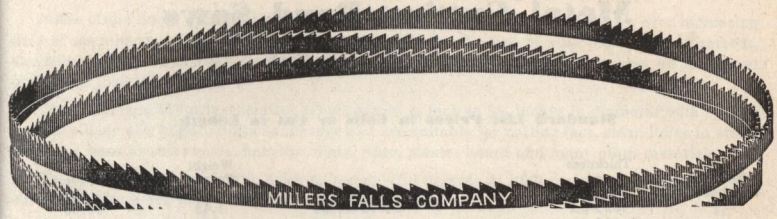
Hand Blades **Specify Brand and Number**

No.	Length Inches	Pitch Teeth per Inch	Width Inches	Thickness Gauge	Weight per Gross Pounds	Code "Millers Falls"	Code "Universal"	Price per Gross
1018	10	18	9/16	.025	5	ZUFAM	ZOGOL	$40.32
1024	10	24	9/16	.025	5	ZUFAX	ZOGUM	40.32
1032	10	32	9/16	.025	5	ZUFBA	ZOGYL	40.32
1218	12	18	9/16	.025	6⅛	ZUFBE	ZOHAM	48.96
1224	12	24	9/16	.025	6⅛	ZUFCO	ZOHED	48.96
1232	12	32	9/16	.025	6⅛	ZUFCY	ZOHIC	48.96

Power Machine Blades **Specify Brand and Number**

No.	Length Inches	Pitch Teeth per Inch	Width Inches	Thickness Gauge	Weight per Gross Pounds	Code "Millers Falls"	Code "Universal"	Price per Gross
2414	12	14	1	.049	24½	ZUFFE	ZOHLR	$172.80
2406	12	6	1	.065	30	ZUFDA	ZOHUE	172.80
2410	12	10	1	.065	30	ZUFEL	ZOHKA	172.80
4414	14	14	1	.049	27½	ZUFIA	ZOHRN	201.60
4406	14	6	1	.065	34	ZUFGI	ZOHMI	201.60
4410	14	10	1	.065	34	ZUFHO	ZOHPO	201.60
4504	14	4	1¼	.065	46	ZUFJY	ZOHST	252.00
4506	14	6	1¼	.065	46	ZUFKE	ZOHUR	252.00
4510	14	10	1¼	.065	46	ZUFLO	ZOHYP	252.00
7414	17	14	1	.049	33	ZUFOR	ZOIPT	244.80
7406	17	6	1	.065	41½	ZUFMA	ZOIJM	244.80
7410	17	10	1	.065	41½	ZUFNI	ZOILP	244.80
7504	17	4	1¼	.065	58	ZUFOX	ZOIRV	306.00
7506	17	6	1¼	.065	58	ZUFPY	ZOITY	306.00
7510	17	10	1¼	.065	58	ZUFRA	ZOIZD	306.00
8410	18	10	1	.065	44½	ZUFRO	ZOJAK	259.20
8504	18	4	1¼	.065	62	ZUFSE	ZOJEL	324.00
8506	18	6	1¼	.065	62	ZUFSI	ZOJKA	324.00
8510	18	10	1¼	.065	62	ZUFST	ZOJKO	324.00
1604	21	4	1½	.065	90	ZUFTA	ZOJLE	453.60
1606	21	6	1½	.065	90	ZUFUG	ZOJNO	453.60
1610	21	10	1½	.065	90	ZUFVO	ZOJON	453.60
4606	24	6	1½	.065	102	ZUFWY	ZOJUP	518.40
4610	24	10	1½	.065	102	ZUFXE	ZOJVA	518.40

Metal Cutting Band Saws



Flexible Back

Developed to meet present-day metal cutting requirements, Millers Falls Band Saws represent years of experience in the field on all types of machines and every conceivable class of work.

Two Types of Steel

Maximum performance and service require two types of steel in bands. One, designated as Type "F," for stainless steels, hard bar stock and ferrous metals in general, and Type "NF," for non-ferrous metals and such shapes as pipe tubing and light structural shapes where severe strain on the teeth is encountered.

Two Tempers

Hardening and tempering are held within very close limits by the use of the best modern, automatically controlled equipment. Every step in the heat-treatment is exact and insures uniformity of temper and quality. Two tempers are supplied. Temper "H" provides a hard, tough tooth for cutting all metals. Temper "HH" is exceptionally hard and is recommended for cutting asbestos products, slate, fibre and similar materials.

Two Sets

The standard or straight set, designated as set "SS," is supplied unless otherwise specified as it produces a uniformly smooth, accurate cut on all classes of general work. Wavy set, designated as "WS," for cutting very thin sheets, tubing, wire, molding, etc., can be furnished but on special order only.

Recommendations for Selection of Pitches, Temper and Speed

Material	Teeth per Inch	Temper	Speed Feet per Min.
Aluminum Alloy	12-14	H	150
Aluminum, Pure	6-8	H	3000
Asbestos Sheets	14	HH	150
Brass Castings, Soft	10-12	H	500
Brass Castings, Hard	12-14	H	150
Brass Sheets	14	H	1000
Bronze Castings	12-14	H	800
Bakelite	10	H	800
Cast Iron	14	H	150
Copper	10-12	H	200
Carbon Tool Steel	14	H	100
Cold Rolled Steel	10-12	H	200
Drill Rod	14	H	100
Fibre	14	HH	500
High Speed Steel	12	H	100
Iron Sheets	18	H	200
Machinery Steel	10-12	H	200
Manganese Bronze	12	H	150
Malleable Iron	12	H	200
Nickel Silver	22	H	100
Nickel Steel	14	H	100
Pipe Iron	12-14	H	150
Slate	10-14	HH	80
Structural Steel	12-14	H	150
Tubing, Brass	14-18	H	300
Tubing, Steel	14-18	H	150

See following page for sizes and prices.

"Millers Falls" Metal Cutting Band Saws

Hard Teeth Flexible Back

Standard List Prices in Coils or Cut to Length

Width Inches	Thickness and Gauge	Teeth Per Inch	Weight Pounds per 100 Feet	List Price per Foot
3/16	.025-23	14-18-24-32	1.43	$0.08
1/4	.025-23	14-18-24-32	1.96	.09
3/8	.025-23	10-12-14-18-24-32	3.01	.10
1/2	.025-23	10-12-14-18-24-32	4.07	.11
5/8	.031-21	8-10-12-14-18-24-32	6.31	.14
3/4	.031-21	6-8-10-12-14-18-24	7.62	.16
1	.036-20	6-8-10-12-14-18-24	11.88	.20

Welds: 3/16, 1/4, 3/8 and 1/2 inch widths $0.40 each
5/8 ,3/4 and 1 inch widths .50 each

Please specify length, width, gauge, teeth per inch and temper of blade wanted. Six inches or more over the even foot on welded saws considered a full foot additional length.

Standard List Cut to Length and Brazed or Welded

Lengths Inclusive	3/16" .025"	1/4" .025"	3/8" .025"	1/2" .025"	5/8" .032"	3/4" .032"	1" .035"
5′ 6″ to 6′ 5″	$0.88	$0.94	$1.00	$1.06	$1.34	$1.46	$1.70
6′ 6″ to 7′ 5″	.96	1.03	1.10	1.17	1.48	1.62	1.90
7′ 6″ to 8′ 5″	1.04	1.12	1.20	1.28	1.62	1.78	2.10
8′ 6″ to 9′ 5″	1.12	1.21	1.30	1.39	1.76	1.94	2.30
9′ 6″ to 10′ 5″	1.20	1.30	1.40	1.50	1.90	2.10	2.50
10′ 6″ to 11′ 5″	1.28	1.39	1.50	1.61	2.04	2.26	2.70
11′ 6″ to 12′ 5″	1.36	1.48	1.60	1.72	2.18	2.42	2.90
12′ 6″ to 13′ 5″	1.44	1.57	1.70	1.83	2.32	2.58	3.10
13′ 6″ to 14′ 5″	1.52	1.66	1.80	1.94	2.46	2.74	3.30
14′ 6″ to 15′ 5″	1.60	1.75	1.90	2.05	2.60	2.90	3.50
15′ 6″ to 16′ 5″	1.68	1.84	2.00	2.16	2.74	3.06	3.70
16′ 6″ to 17′ 5″	1.76	1.93	2.10	2.27	2.88	3.22	3.90
17′ 6″ to 18′ 5″	1.84	2.02	2.20	2.38	3.02	3.38	4.10
18′ 6″ to 19′ 5″	1.92	2.11	2.30	2.49	3.16	3.54	4.30
19′ 6″ to 20′ 5″	2.00	2.20	2.40	2.60	3.30	3.70	4.50
20′ 6″ to 21′ 5″	2.08	2.29	2.50	2.71	3.44	3.86	4.70

This list is compiled on a basis to include all sizes now in use, and is to be used on all cut-to-length orders.

When ordering give the following information if possible: Length of saw if welded. Material to be usually cut. Thickness of section to be cut. Specify number of teeth per inch. Speed of saw in feet per minute. Pitch and widths of saw previously used. If trouble developed describe scroll or straight cutting.

High Speed Steel Hole Saws

Made of the finest quality of high speed steel, these hole saws are finding an ever increasing field of usefulness. They were developed originally for the use of auto mechanics, plumbers, steamfitters, millwrights and electricians, but more recently are finding their way on to special production jobs in industry.

They are made in thirty-one sizes ranging from ¾ inch to 5⅝ inches in diameter with special sizes available at a slight additional charge and are suitable for cutting fast, clean holes in steel, cast-iron, hard or soft woods, bakelite, slate, fibre, plaster board and many other materials.

They can be used in electric drills or power drill presses at high peripheral speeds and will cut many more holes than an ordinary carbon steel saw.

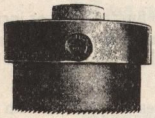
The cups and mandrels can be used indefinitely. The blades and pilot drills can be replaced at small expense when worn out.

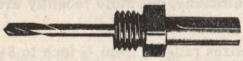
Free Dealer Display Stand

A very neat, compact display fixture of red lacquered wood with a three-color decalcomania on the front panel is furnished free to dealers stocking a reasonable assortment of Millers Falls High Speed Steel Hole Saws.

It holds three of any size saws, is only 7 inches high and has a good broad base and low center of gravity to prevent its tipping over.

High Speed Steel Hole Saws





For proper sizes of saw for pipe taps and pipe and conduit entrance sizes see last two columns below.

Sizes ¾ inch to 1 inch inclusive have 8 teeth per inch, sizes 1⅛ inches to 1⅞ inches inclusive 6 teeth per inch, and sizes 2 inches to 5⅝ inches inclusive 4 teeth per inch. Sizes 1⅛ inches to 2½ inches inclusive can be furnished with 8 teeth per inch if desired.

Depth of cut of all saws ⅞ inch.

Size Inches	Cup and Saw No.	Cup and Saw Price	Saw Only No.	Saw Only Price	For Pipe Tap Size	For Pipe Entrance Size
¾	12	$1.55	012	$0.75		⅜
⅞	14	1.55	014	.75	¾	½
15/16	15	1.55	015	.75		
1	16	1.55	016	.75		
1 1/16	17	1.55	017	.75	1	
1⅛	18	1.55	018	.75		¾
1¼	20	1.55	020	.75		
1⅜	22	1.55	022	.75		1
1½	24	1.55	024	.75	1¼	
1⅝	26	1.90	026	1.10		
1¾	28	1.90	028	1.10	1½	1¼
1⅞	30	1.90	030	1.10		
2	32	1.90	032	1.10		1½
2⅛	34	2.30	034	1.55		
2¼	36	2.30	036	1.55	2	
2⅜	38	2.30	038	1.55		
2½	40	$2.30	040	$1.55		2
2⅝	42	2.30	042	1.55		
2¾	44	2.30	044	1.55	2½	
2⅞	46	2.30	046	1.55		
3	48	2.30	048	1.55		2½
3⅛	50	2.30	050	1.55		
3¼	52	2.30	052	1.55	3	
3⅜	54	2.30	054	1.55		
3½	56	2.30	056	1.55		
3⅝	58	2.65	058	1.60		3
4⅛	66	2.90	066	1.85		3½
4¼	68	2.90	068	1.85		
4¾	76	3.65	076	2.10	4½	4
5⅛	82	3.95	082	2.35		
5⅝	90	4.20	090	2.65		

Mandrels

Mandrels are furnished complete with pilot drill and spring. Drills quickly renewable.

		Price Each
No. 1218	Fitting Sizes Nos. 12 to 18 inclusive	$1.10
No. 2054	Fitting Sizes Nos. 20 to 56 inclusive	1.10
No. 5890	Fitting Sizes Nos. 58 to 90 inclusive	1.10

Packed one in a box.

No. 70 Circular Saws

For Metal, Bakelite, Fibre, Bronze, or Ivory

These moderately priced circular saws are most satisfactory for cutting copper, brass, silver, bakelite, fibre, ivory, bone and similar materials.

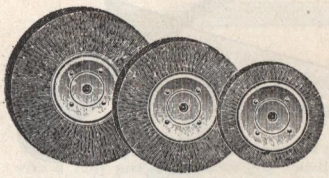
Exceptional quality is obtained by use of the highest grade of hot rolled sheet steel. The teeth are carefully cut and oil tempered making them well suited for screw slotting or cutting shallow slots in iron or steel.

Made in six thicknesses—.016, .021, .028, .032, .040 and .050 inch.

Diameter	Hole	Code	Price per Dozen
2 inches	⅜ inch	YAMAD	$3.20
2½ inches	⅜ inch	YAMBO	3.20
3 inches	½ inch	YAMCY	4.00

Packed one dozen in a box.

Wire Wheel Brushes



These wire wheel brushes are rigid and compactly made, having more wires per square inch of brush surface than the average wheel. Wires being tightly compressed give greater wearing strength to brush. Have interchangeable bushings which slip into the 2-inch standard size opening and adjusts to fit any size spindle.

Arbor bushings can be furnished with ½-inch, ⅝-inch, ¾-inch or 1-inch arbor hole.

It is important that the diameter of the arbor hole wanted be specified.

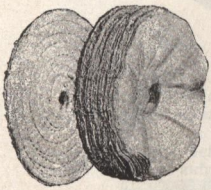
	Diameter	Width	Price Each
No. 24	4 inches	1 inches	$2.20
No. 26	6 inches	1⅛ inches	2.75
No. 28	8 inches	1½ inches	3.85
No. 210	10 inches	2 inches	5.50
No. 212	12 inches	2½ inches	7.70

Extra arbor bushings, per set $0.20

Grinding Wheels

These are the best quality wheels made in the most commonly used grains and grades. Especially adapted for use on electric drills and grinders, grinding heads, etc.

	Diameter	Face	Arbor Hole	Grain	Grade	Price Each
No. 1519	4 inches	½ inch	½ inch	60	M	$1.15
No. 636	6 inches	½ inch	½ inch	36	O	2.20
No. 660	6 inches	½ inch	½ inch	60	M	2.20
No. 1036	10 inches	1 inch	¾ inch	36	O	6.60
No. 1060	10 inches	1 inch	¾ inch	60	M	6.60
No. 2036	10 inches	1¼ inches	¾ inch	36	O	8.25
No. 2060	10 inches	1¼ inches	¾ inch	60	M	8.25



No. 1521 Buffing Wheel

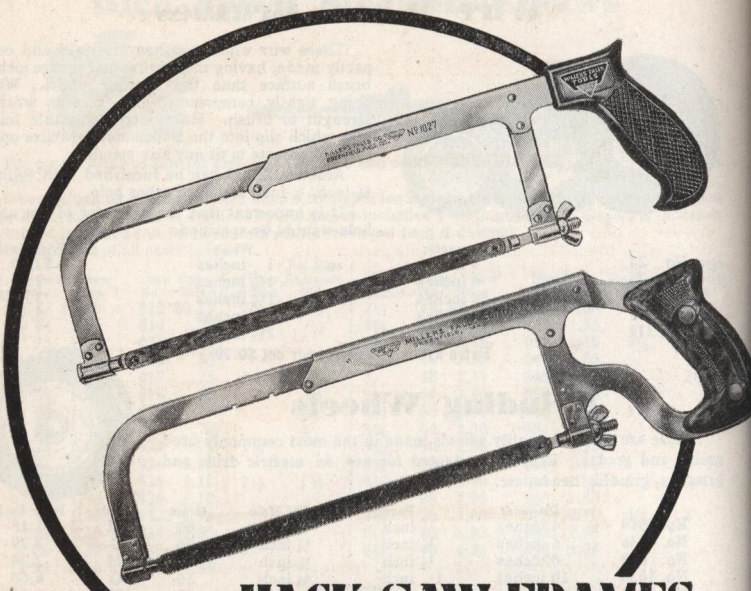
This buffing wheel will meet the need for a light, portable buffer for polishing a number of different objects that have formerly necessitated hand work. The size of the wheel is 6 inches with a ½-inch hole to fit on Arbor. Two sections of twenty-ply are required to make the wheel one-half inch thick.

No. 1521.....Price, per 20-ply Section $0.38

No. 1522 Carbon Removing Brush

Very useful in removing carbon from cylinder heads, tops of pistons, valve ports, etc. Leaves fine burnished surface upon which it is hard for carbon to collect. Diameter of brush, 1¼ inches. Length of wire, 1⅛ inches. Spindle, ¼-inch diameter. Can be used in any electric drill.

No. 1522.....Price $1.65



HACK SAW FRAMES

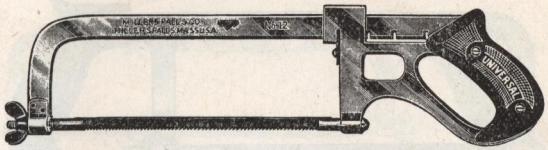
The several interesting additions to the Millers Falls Hack Saw Frame line make it more than ever the most outstanding and complete line offered by any manufacturer.

It embraces adjustable and solid frames, molded and all-steel pistol grip and wood handles with several weights of stock, and nickel, natural steel and black enamel finishes.

In every instance the stock used, the care exercised in securing uniformly even, undistorted bends, close alignment of the studs and ample tensioning capacity assure maximum performance from the blade. Nicety of design gives the hang or balance so necessary for free and easy operation.

Our long experience in the manufacture of both frames and blades is a guarantee of a thoroughly dependable product.

No. 12 Hack Saw Frame

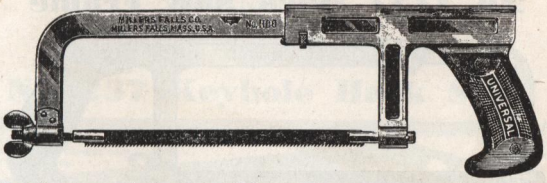


A heavy, rigid, all-steel frame with a positive adjustment for 8 to 12 inch blades and equipped with a fully protected pistol grip handle. Special, checked black composition handle plates screwed on both sides. Blades strained by means of thumb nut and can be faced in four directions. One 10-inch blade furnished with each frame.

All exposed metal parts nicely polished, nickeled and buffed.

	Capacity	Depth	Stock	Weight	Code	Price Each
No. 12	8-12 inches	3⅛ inches	3/16 x 13/16 inch	2 lbs.	ICIAN	$3.25

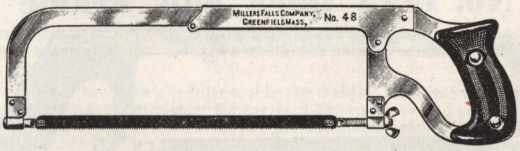
No. 1100 Hack Saw Frame



An exceptionally strong, rigid, all-metal frame with a one-piece solid steel back that telescopes into the frame casting. Checked pistol grip handle. Adjustable for 8 to 12 inch blades. Blades faceable in four directions. Thumb nut blade tension. One 10-inch blade furnished with each frame. Entire frame "Sheradized" to prevent rusting.

	Capacity	Depth	Stock	Weight	Code	Price Each
No. 1100	8-12 inches	3⅛ inches	3/16 x 13/16 inch	1¼ lbs.	ICERY	$2.50

No. 48 Hack Saw Frame

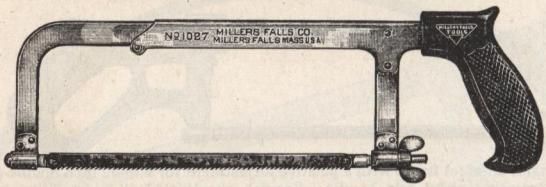


For design, serviceability and price appeal in the higher quality field this frame has never been approached. Its unusual rigidity and fine balance, combined with its finely polished, nickel-plated and buffed finish, are sure to make it one of the year's best sellers. Comfortable checked composition pistol grip handle. Adjustable for 8 to 12 inch blades. Equipped with one 10-inch blade.

	Capacity	Depth	Stock	Weight	Code	Price Each
No. 48	8-12 inches	3¼ inches	3/16 x 11/16 inch	1¾ lbs.	INPAR	$2.00

Packed one in a box.

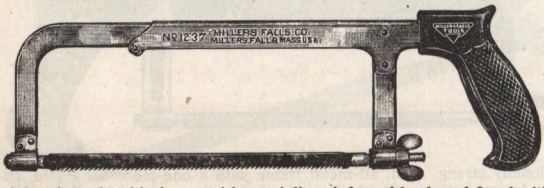
No. 1027 Hack Saw Frame



A fine quality frame that appeals instantly to the tool-wise purchaser. The heavy back reinforcement extends down the entire length of the molded black pistol grip handle, making it practically unbreakable. The hang is excellent. Adjustable for 8 to 12 inch blades which can be faced in four directions. Equipped with one 10-inch blade. Finely polished, nickel plated and buffed.

	Capacity	Depth	Stock	Weight	Code	Price Each
No. 1027	8-12 inches	3¼ inches	3/16 x 11/16 inch	1¾ lbs.	ICHNO	$1.70

No. 1237 Hack Saw Frame

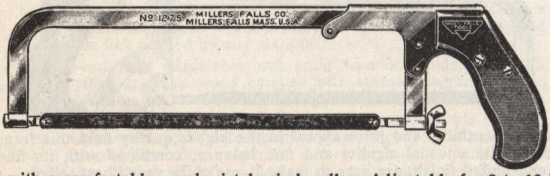


A substantial and serviceable frame with specially reinforced back and fitted with the popular black composition pistol grip handle. Easily adjustable for 8 to 12 inch blades which can be faced in four directions. Equipped with one 10-inch blade. Nicely finished in buffed nickel.

	Capacity	Depth	Stock	Weight	Code	Price Each
No. 1237	8-12 inches	3¼ inches	3/16 x 11/16 inch	1¾ lbs.	INVER	$1.20

Packed one in a box.

No. 1275 Hack Saw Frame

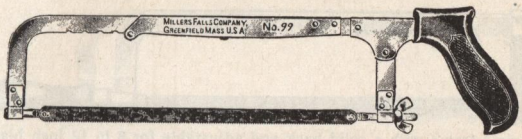


Equipped with a comfortable wood, pistol grip handle. Adjustable for 8 to 12 inch blades. Blades can be faced in four directions. One 10-inch blade furnished with each frame.

	Capacity	Depth	Stock	Weight	Code	Price Each
No. 1275	8-12 inches	2½ inches	3/16 x 11/16 inch	1¼ lbs.	IMOTA	$0.70

Packed two in a box.

No. 99 Hack Saw Frame



A serviceable frame offered at a very attractive price. The handle is made of black composition, reinforced its entire length, knurled and shaped to give a sure, comfortable grip. The balance is excellent. The frame construction is substantial and permits ample tension on the blade by means of a wing nut. Blade can be faced four ways. Equipped with one 10-inch hack saw blade. Quickly and positively adjustable for 8 to 12 inch blades.

All exposed metal parts nickel plated and buffed.

	Capacity	Depth	Stock	Weight	Code	Price Each
No. 99	8-12 inches	2¾ inches	5/32 x 11/16 inch	1⅛ lbs.	INNOT	$0.60

Packed two in a box.

No. 237 Keyhole Hack Saw

CUTS NAILS, METAL LATH, PLASTER BOARD, STUCCO ARMOURED CABLE, CONDUIT, BONE, HARD and SOFT WOOD, Etc., Etc.
USE IT TO CUT IN THE CORNERS
GOODELL-PRATT CO.
MADE IN U.S.A.
KEYHOLE
HACK SAW
FOR CUTTING METAL or WOOD
25¢
MADE IN U.S.A. BY- GOODELL-PRATT COMPANY GREENFIELD, MASSACHUSETTS

Cuts nails, metal lath, plaster board, stucco, armored cable, conduit, packing, bone, bakelite, fibre, hard and soft wood, etc., etc. Great for use in the corners where an ordinary hack saw frame cannot be used.

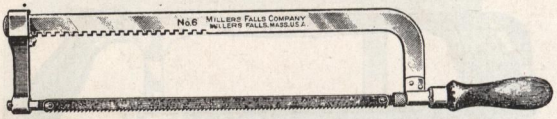
This keyhole hack saw has been a regular tool in the Goodell-Pratt line for years. Recently it was mounted on the attractive two-color display card shown above and priced at twenty-five cents. This increased the sale several thousand per cent, and today it is one of the fastest selling items in the line.

The handle is nicely finished in red and black enamel; it is light and fits the hand comfortably. The blade, with 18 teeth per inch, is made of the same materials and with exactly the same care as our regular hack saw blades. It has a flexible back which minimizes breakage.

	Length Blade	Length Overall	Weight	Code	Price Each
No. 237	5½ inches	9½ inches	4 ozs.	YEYAT	$0.25
No. 7	Extra blades, per dozen			YEYDB	1.45

Packed six saws in a box.

No. 6 Hack Saw Frame



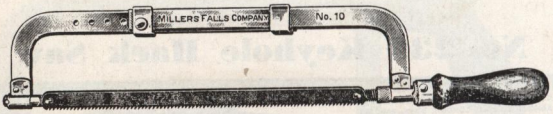
A compact, rigid frame with a solid back and adjustable for 8 to 12 inch blades by moving the sliding end post. Tension on blade secured by turning handle. Blade can be faced in four directions. One 10-inch blade furnished with each frame.

Entire tool well polished and nickel plated. Attractive tropical hardwood handle.

	Capacity	Depth	Stock	Weight	Code	Price Each
No. 6	8-12 inches	2¾ inches	3/16 x 13/16 inch	1½ lbs.	ICONO	$2.35

Packed one in a box.

No. 10 Hack Saw Frame

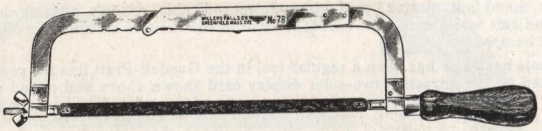


Unusually rigid back construction. Locked for different length blades by means of set screw. Tension on blade secured by turning handle. Blade can be faced in four directions. One 10-inch blade furnished with each frame. Attractive tropical hardwood handle.

	Capacity	Depth	Stock	Weight	Code	Price Each
No. 10	8-12 inches	2⅜ inches	3/16 x 11/16 inch	1¼ lbs.	ICING	$2.35

Packed one in a box.

No. 78 Hack Saw Frame



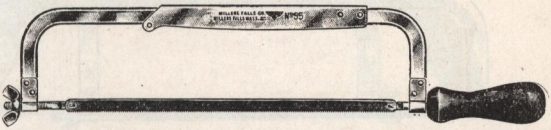
A light, stiff frame at a low price. Adjustable for 8 to 12 inch blades. Blade tension secured by means of thumb nut. Blades can be faced in four directions. Mahogany finished hardwood handle. One 10-inch blade furnished with each frame.

Frame polished and nickel plated.

	Capacity	Depth	Stock	Weight	Code	Price Each
No. 78	8-12 inches	2½ inches	5/32 x 11/16 inch	1 lb.	IDLER	$1.10

Packed one in a box.

No. 95 Hack Saw Frame



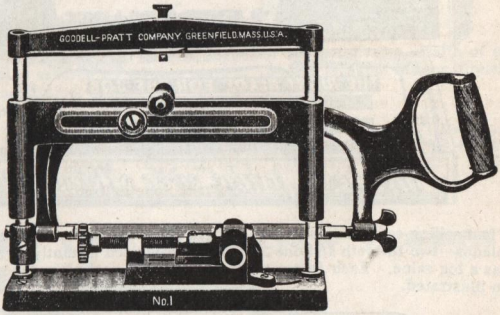
A light frame with adjustable sheath back. Blade faceable in four directions. Thumb nut tension of blade. One 8-inch blade furnished with each frame.

Frame nickel plated. Hardwood handle mahogany finished.

	Capacity	Depth	Stock	Weight	Code	Price Each
No. 95	8-12 inches	2½ inches	$^{11}/_{64}$ x $^{11}/_{16}$ inch	13 ozs.	IMMIX	$0.50

Packed one in a box.

No. 1 Bench Hack Saw



A machine that produces good, clean cuts and reduces hack saw blade breakage to a minimum. Uses either 8 or 9 inch blades.

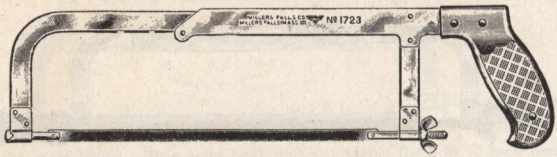
Blades held in a rigid cast frame that operates in conjunction with a second frame that controls the vertical movement and provides all the weight necessary on the blade. Tension on blade secured by means of a wing nut. Equipped with a vise that holds rods two inches square. This vise can be swung to cut at any angle from 90 degrees to 45 degrees or mitre. Stroke, 6¾ inches. Height, 10¼ inches. Base, 10¾ x 3¾ inches.

Made entirely of iron and steel with the iron parts finished in red and black enamel.

	Capacity	Weight	Code	Price Each
No. 1	2 x 2 inches	10¾ lbs.	WYBAB	$10.00

Packed one in a wooden box.

No. 1723 Hack Saw Frame

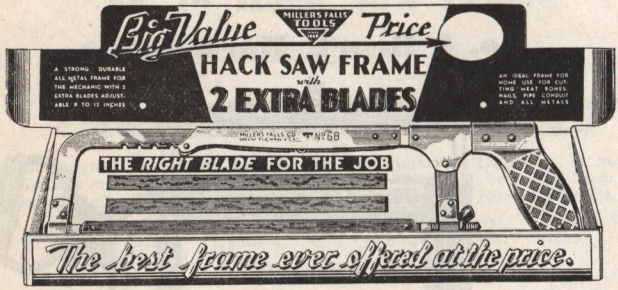


A serviceable, all-metal frame adjustable for 8 to 12 inch blades. Pressed steel pistol grip handle checked to give a good, sure grip. Blades can be faced four ways. Thumb nut provides ample tension on blade. One 10-inch blade furnished with each frame. Entire frame nicely polished, nickel plated and buffed.

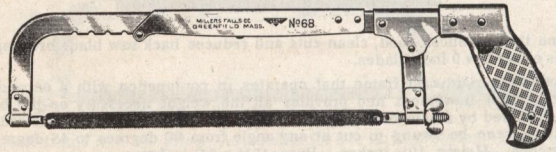
	Throat	Stock	Weight	Code	Price Each
No. 1723	3½ inches	3/16 x 11/16 inch	1½ lbs.	IMPEL	$1.20

Packed one in a box.

No. 68 Hack Saw Frame


Big Value
MILLERS FALLS TOOLS
Price
HACK SAW FRAME
with
2 EXTRA BLADES
A STRONG DURABLE ALL-METAL FRAME FOR THE MECHANIC WITH 3 EXTRA BLADES ADJUSTABLE 8 TO 12 INCHES
AN IDEAL FRAME FOR HOME USE FOR CUTTING HEAT RODS, NAILS, PIPE, CONDUIT AND ALL METALS
MILLERS FALLS CO. GREENFIELD, MASS. №68
THE RIGHT BLADE FOR THE JOB
The best frame ever offered at the price.

A fast selling combination of a good rigid all-metal adjustable frame and three 10-inch hack saw blades—two 18-tooth and one 24-tooth—recognized instantly by mechanics and home craftsmen as a big value. Each frame with three blades packed in the attractive two-color display carton illustrated.

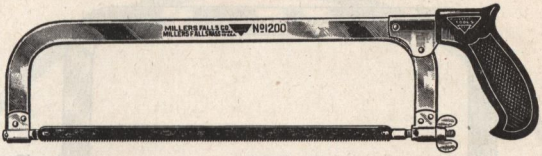


Frame well constructed throughout and fitted with an indestructible all-metal pistol grip handle. It is adjustable for 8 to 12 inch blades which may be faced in any of four directions. Thumb nut provides blade tension. Entire tool well nickeled and buffed.

	Throat	Stock	Weight	Code	Price Each
No. 68	2¾ inches	5/32 x 11/16 inch	1½ lbs.	INROT	$1.00

Packed one in a display; two displays in a package.

No. 1200 Hack Saw Frame



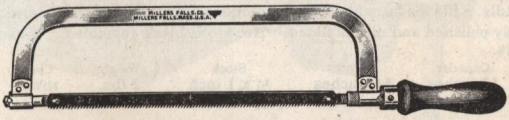
A solid frame with black composition pistol grip handle built to stand hard usage. Holds 12-inch blades only. Blade tension secured by turning thumb nut. Blade faceable in four directions. One 12-inch blade furnished with each frame.

Frame nicely polished and nickel plated.

	Capacity	Depth	Stock	Weight	Code	Price Each
No. 1200	12 inches	3½ inches	3/16 x 13/16 inch	1½ lbs.	IMAGE	$1.80

Packed one in a box.

Nos. 125-126 Hack Saw Frames



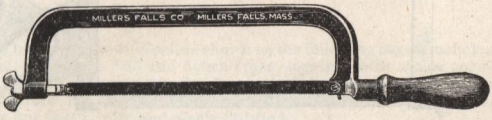
Well made, low priced solid frames that can be depended on to deliver a wealth of satisfactory service. Blade tension secured by turning handle. Blades faceable in four directions. One blade furnished with each frame.

Nickel plated. Mahogany finished hardwood handle.

	Capacity	Depth	Stock	Weight	Code	Price Each
No. 125	10 inches	3⅛ inches	3/16 x 11/16 inch	1 lb.	IMBED	$1.10
No. 126	12 inches	3⅛ inches	3/16 x 11/16 inch	1¼ lbs.	IMBUE	1.25

Packed one in a box.

Nos. 4A-4D Cast Hack Saw Frames

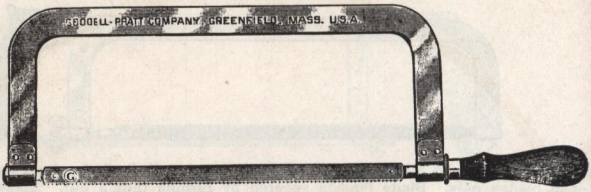


Black enameled, cast gray iron frames equipped with mahogany finished hardwood handles. Blade tension secured by means of thumb nut. Blade faceable in four directions. No blades furnished with these frames.

	Capacity	Depth	Weight	Code	Price Each
No. 4A	8 inches	2¼ inches	1 lb.	IMIDE	$0.55
No. 4B	9 inches	2¼ inches	1⅛ lbs.	IMPLY	.60
No. 4C	10 inches	2¼ inches	1¼ lbs.	IMPOR	.60
No. 4D	12 inches	2¼ inches	1⅝ lbs.	IMANE	.70

Packed six in a box.

Heavy Hack Saw Frames



Made for extra heavy work on rods and bars, structural shapes, etc. The heavy backs have smooth, even bends. Blade tension secured by turning handle. Blades faceable in four directions. One 12-inch blade furnished with each frame.

Attractively finished in black enamel. Mahogany finished hardwood handles.

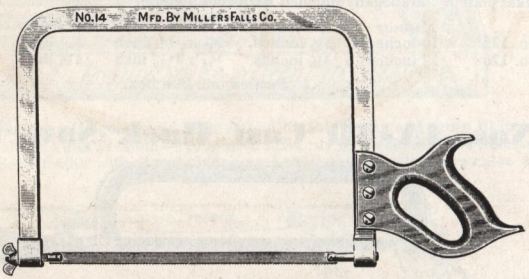
	Capacity	Depth	Stock	Weight	Code	Price Each
No. 66B	12 inches	3½ inches	¼ x 1 inch	1¾ lbs.	YAKAB	$2.50
No. 14B	12 inches	5¼ inches	¼ x 1 inch	2 lbs.	WYNNA	2.40

Similar to the frames above but with slightly different construction. Blade tension secured by tightening handle. Blades faceable in four directions. One blade furnished with each frame.

No. 15 is nicely polished and nickel plated. No. 515 is black enameled. Mahogany finished hardwood handles.

	Capacity	Depth	Stock	Weight	Code	Price Each
No. 15	12 inches	5¼ inches	¼ x 1 inch	2 lbs.	IDYLL	$3.00
No. 515	12 inches	5¼ inches	¼ x 1 inch	2 lbs.	ILIAC	2.35

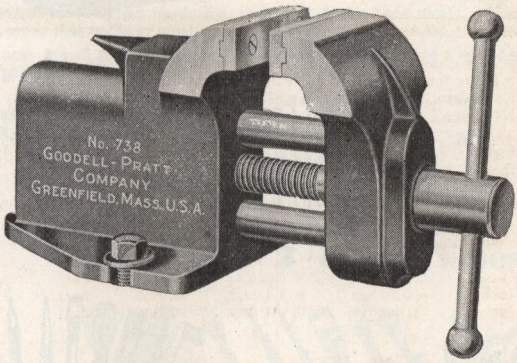
Rail Saws



Deep throated, heavy frames for cutting steel rails, girders and other large structural steel shapes. Handles are selected beech, shaped to give a sure, comfortable grip. Thumb nut blade tension. Blades faceable in four directions. One 12-inch blade furnished with each frame. Nos. 14 and 14½ well polished and nickel plated. No. 24 has black enameled frame.

	Capacity	Depth	Stock	Weight	Code	Price Each
No. 14	12 inches	10¼ inches	¼ x 1 inch	3⅝ lbs.	ILEUM	$4.30
No. 14½	12 inches	7¼ inches	¼ x 1 inch	3 lbs.	ILKON	4.00
No. 24	12 inches	10¼ inches	¼ x 1 inch	3⅝ lbs.	ILECK	2.80

Packed one in a box.



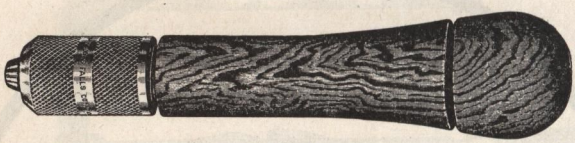
VISES

The active line of Vises, as shown on the following pages, includes hand, pin, bench drill and bench types, together with a new popularly priced pipe vise for the home workshop or garage. A new carpenters' bench vise is shown on page 52. Without exception they are finely made and nicely finished.

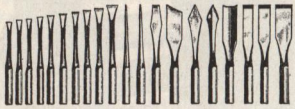
The ever popular Goodell-Pratt Bench Vises have been continued complete with the exception of the two heaviest sizes. The twin guide rod construction of these vises, with its smooth action, absence of play in the movable jaw, and the accuracy with which the jaws meet, set them apart from the many substitutes offered in the past few years.

Insure the quality of your vise by insisting that it bear the Goodell-Pratt name.

Tool Holders



No. 5



Tools for No. 1

Tools for No. 4

Tools for No. 5

The chucks of these tools have two steel jaws that hold the square shanks of the tools supplied very securely. The chuck shells are long and well knurled to facilitate tightening and loosening. They are heavily nickel plated and buffed.

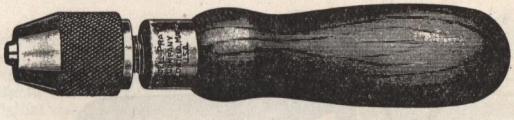
The handles are hollow with a screw cap and will hold all the tools furnished. They are turned from beautifully grained tropical hardwood and highly polished.

The tools are made of a good grade of steel, well shaped, carefully heat-treated and will give unusual service.

	Length Holder	No. of Tools	Length Tools	Weight	Code	Price Each
No. 1	6 inches	20	1¾ inches	½ lb.	FAIRY	$2.00
No. 4	6¼ inches	10	2¼ inches	⅝ lb.	FECKS	2.50
No. 5	7½ inches	10	4 inches	⅞ lb.	FEEZE	3.45

No. 1 packed six in a box; Nos. 4 and 5 one in a box.

Nos. 104 and 106 Pin Vises



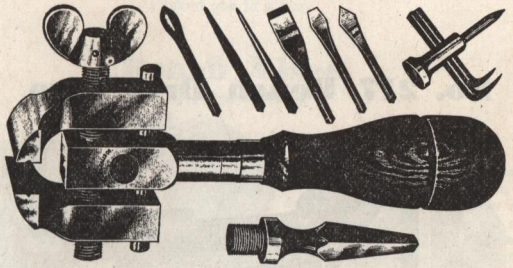
The handles are polished hardwood, shaped to fit the hand nicely. They have holes drilled through in order that wires or small rods of any length may be held.

The chucks are all steel with three hardened jaws. They have a very firm grip. The chuck shells are polished and nickel plated.

	Capacity	Net Weight	Code	Price Each
No. 104	0 to 5/32 inch	4 ozs.	YAYIR	$1.10
No. 106	0 to 1/4 inch	6 ozs.	YAYMK	1.30

Packed one in a box.

Nos. 1 and 2 Hand Vises



Exceptionally strong, well made vises with detachable handles that can be screwed into the vise at right angles. Tempered forged steel jaws. Steel screw, body and guide rod. All nicely nickel plated and buffed.

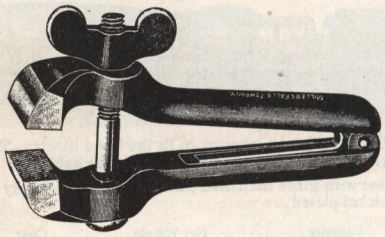
No. 1 has hollow, screw cap, tropical hardwood handle containing chisel, screw driver, countersink, square reamer, brad awl, scratch awl and washer cutter. Bit shank provided that can be interchanged with handle.

No. 2 same but with solid mahogany finished hardwood handle and no tools.

	Length	Width Jaws	Jaws Open	Weight	Code	Price Each
No. 1	6¾ inches	1¼ inches	1 inch	17 ozs.	RAVEN	$5.50
No. 2	7 inches	1¼ inches	1 inch	14 ozs.	RAZOR	5.00

Packed one in a box.

No. 3 Hand Vise

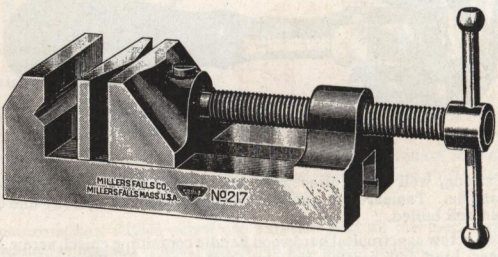


Forged steel jaws and handles. Jaw faces checked to give good grip. Tightened by means of heavy steel thumb nut and screw bolt. Heavy spring opens jaws as nut is loosened. Jaws polished. Rest of tool finished in black and aluminum lacquer.

	Length	Width Jaws	Jaws Open	Weight	Code	Price Each
No. 3	5 inches	1½ inches	1¼ inches	1⅛ lbs.	REAKS	$1.85

Packed one in a box.

No. 217 Bench Drill Vise



A well made, nicely finished vise for use at the bench or on a bench drill or drill press. Jaws, base, sides and bearing parts accurately machined. Removable swivel jaw. Steel screw. Capacity with swivel jaw removed, 3 inches.

	Width Jaws	Jaws Open	Weight	Code	Price Each
No. 217	2⅜ inches	2⅝ inches	4¾ lbs.	DEIGN	$3.50

Packed one in a box.

Bench Vises

1 to 2½ Inch Jaws

The twin guide rod construction of these vises was originated by Goodell-Pratt and marked a big advance in vise construction. It has since been appropriated by many other manufacturers but in no instance has the quality of these original vises been approached.

They are operated by an accurately cut-steel feed screw. Two steel guide rods are provided to insure rigidity. All parts are carefully fitted so that the jaws are easily operated, but without lost motion. After the vise is completely assembled, the jaws are machined so that they will meet accurately.

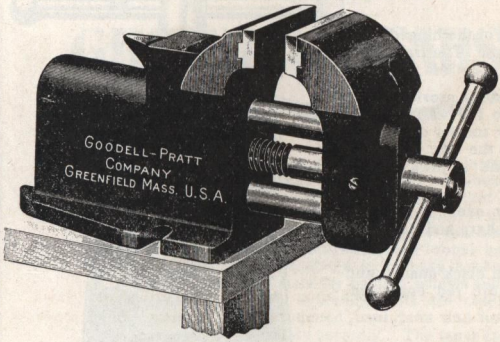
All steel parts are polished and all iron parts are finely finished in red and black enamel.

	Width Jaws	Jaws Open	Net Weight	Code	Price Each
No. 160	1 inch	1½ inches	1⅜ lbs.	YEGAC	$0.90
No. 663	1½ inches	1½ inches	2 lbs.	ZAGIT	1.10
No. 161	2 inches	2 inches	3⅜ lbs.	YEGCA	1.65
No. 708	2¼ inches	2 inches	3¾ lbs.	ZAPFO	2.20
No. 664	2½ inches	2½ inches	7¼ lbs.	ZAGOV	3.10

Packed one in a box.

Bench Vises

2½-Inch Jaws



These are excellent bench vises of medium size. The steel feed screw and two ⅝-inch steel guide rods give it rigidity and the careful fitting makes it work smoothly and grip tightly. The special thread on the feed screw was designed to give it great strength.

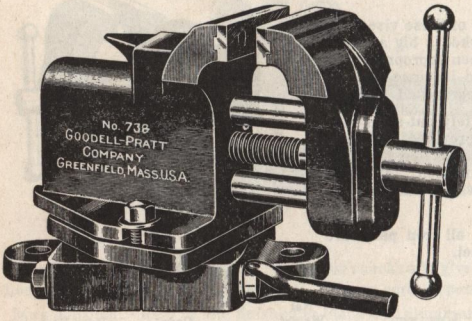
Steel parts nicely polished. Iron parts finely finished in glossy red and black enamel.

	Width Jaws	Jaws Open	Net Weight	Code	Price Each
No. 168 Steel	2½ inches	2½ inches	10 lbs.	YEGYJ	$6.70
No. 709 Plain	2½ inches	2½ inches	10 lbs.	ZAPID	4.40

Packed one in a box.

No. 738 Swivel Bench Vise

2½-Inch Steel Jaws



This is the No. 168 Vise, bolted to a swivel base, which in turn is bolted to the bench.

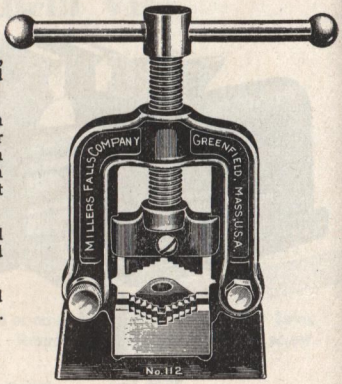
The base is heavy, with a quick, positive lock controlled by the lever handle shown, allowing the vise to be swung to and locked at any position instantly.

The jaw faces are made of very tough steel, 2½ x ¾ inch, scored and case hardened. They are held in position by taper-headed screws.

	Width Jaws	Jaws Open	Weight	Code	Price Each
No. 738	2½ inches Steel	2½ inches	16 lbs.	ZAVAR	$10.50
No. 737	Swivel base only for vises Nos. 168 and 709				3.30

Packed one in a box.

No. 112 Pipe Vise



A powerful, sturdily built vise, of the hinged type, for holding pipe up to 1¼ inch size. The frame and base are made of malleable iron.

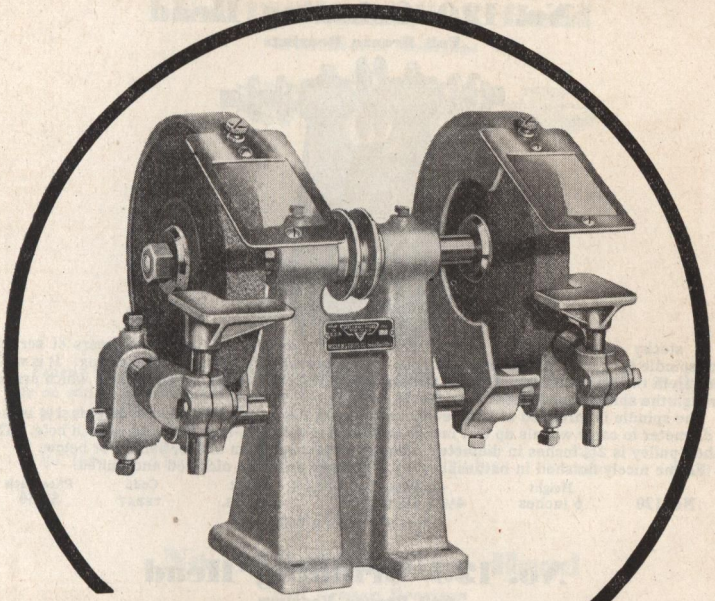
The base casting is heavy and is provided with three holes for bolting solidly to the wall, post or bench. The frame is locked by means of the pin with the knurled head shown at the left. This pin cannot be entirely withdrawn and is always right there when it is wanted.

The cross handle and screw exert a powerful pressure on the jaws, which are sharp and hardened to give a sure, positive grip.

The frame is nicely finished in black enamel and the upper jaw and its holders are red enameled. All exposed steel parts polished.

	Capacity	Height Frame	Weight	Code	Price Each
No. 112	1¼ inches	5¼ inches	2¾ lbs.	REACT	$2.00

Packed one in a box.



GRINDING HEADS

These new Polishing and Grinding Heads replace in entirety both the old Millers Falls and Goodell-Pratt lines.

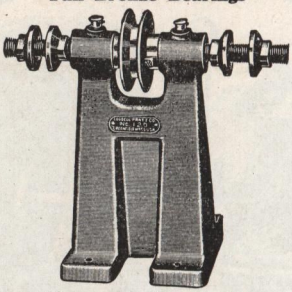
The bases are heavier and so designed that the drive can be either from above, behind or below; the pulleys are for the modern form of V-belt drive, ideal for this type of machine. The spindles are carefully machined and run in long bronze bearings which are wick-oiled from large reservoirs in the base just below the bearings.

The flanges or collars for holding wheels and saws are larger in diameter, and the tightening nuts are case-hardened. The chucks have three hardened steel jaws and hold round shanks within their capacity very securely. The taper spindles have deep, clean threads which operate wood center wheels perfectly. Two numbers are equipped with efficient wheel guards and work rests.

Beautifully finished and finely manufactured, we unreservedly recommend these machines for machine shop and home workshop use.

No. 120 Grinding Head

Full Bronze Bearings



A stocky machine with a solid frame and ample base to withstand years of service. The spindle is ½ inch in diameter and runs in two bronze bearings 1¼ inches long. It is wick-oiled from two large reservoirs in the casting just below the bearing on either side which are fed through the spring top oilers.

The spindle is threaded at both ends and carries two sets of hardened flanges 1¼ inches in diameter to carry wheels up to 4 inches in diameter with a ¾-inch face and ½-inch hole. The V-belt pulley is 2¼ inches in diameter. Designed to drive from above, behind or below.

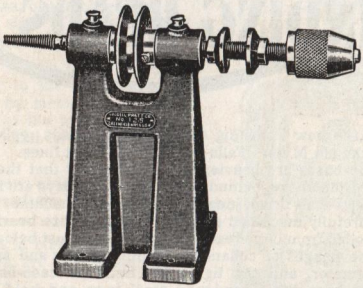
Frame nicely finished in battleship gray. Flanges polished, nickeled and buffed.

	Height	Base	Weight	Code	Price Each
No. 120	6 inches	4⅛ x 4⅛ inches	5¼ lbs.	YEBAT	$2.50

Packed one in a box.

No. 125 Grinding Head

Full Bronze Bearings



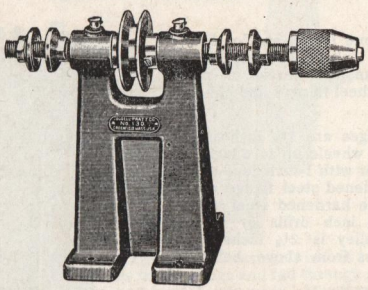
Exactly the same as No. 120 above, but fitted with a clean, deep taper thread spindle in place of the wheel arbor on the left. This permits the use of buffing wheels and a great variety of wheels built on wood centers, and on the right an all-steel three-jawed chuck, that holds rods or drills from 0 to ⅜ inch in diameter. Height given is to center of spindle.

	Height	Base	Weight	Code	Price Each
No. 125	6 inches	4⅛ x 4⅛ inches	5 lbs.	YEBVO	$3.00

Packed one in a box.

No. 130 Grinding Head

Full Bronze Bearings



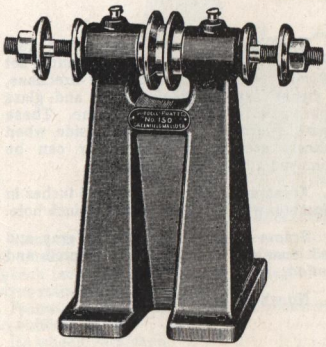
Exactly the same as No. 120 on the preceding page, but with a longer spindle on the right side on which is a nickeled and buffed all-steel chuck with three hardened jaws that holds 0 to ⅜ inch round shank drills or rods.

	Height	Base	Weight	Code	Price Each
No. 130	6 inches	4⅛ x 4⅛ inches	5½ lbs.	YECDY	$3.20

Packed one in a box.

No. 150 Grinding Head

Full Bronze Bearings



A heavier head with bigger base, greater height and ¾-inch spindle running in two bronze bearings 1½ inches long. The bearings are wick-oiled from two large reservoirs in the frame casting directly below the bearings. These are fed through spring top oilers. Arbor on either end of spindle with 1¾-inch flanges for holding wheels up to 6 inches or larger in diameter with 1-inch face and ½-inch hole. Flange nuts are hardened. The V-belt pulley is 2¼ inches in diameter and can be driven from above, behind or below.

Frame finished in battleship gray enamel. Flanges nickel plated and buffed.

	Height	Base	Weight	Code	Price Each
No. 150	7½ inches	5 x 5 inches	8¾ lbs.	YEEVO	$5.00

Packed one in a box.

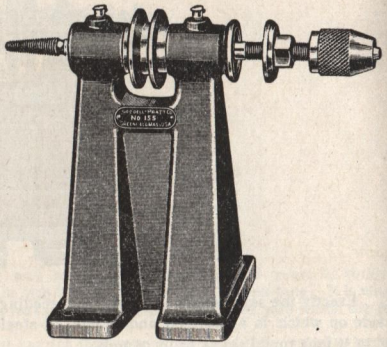
No. 155 Polishing Head

Full Bronze Bearings

Built on the same frame as No. 150. The spindle is ¾ inch in diameter and carries a deep, clean taper thread on one end and a pair of wheel flanges and chuck on the other.

The wheel flanges are 1¾ inches in diameter and hold wheels up to 6 inches or larger in diameter with 1-inch face and ½-inch hole. Hardened steel flange nut. The chuck has three hardened steel jaws and holds 0 to ⅜ inch drills or rods. Polished V-belt pulley is 2¼ inches in diameter and drives from above, behind or below.

Frame finished in battleship gray enamel. Flanges and chuck nickel plated and buffed.

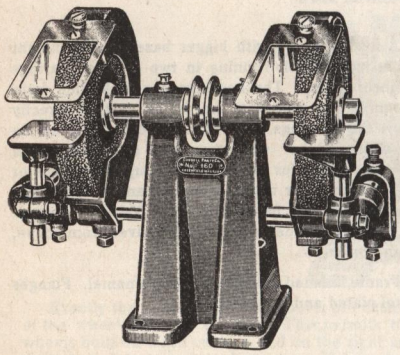


	Height	Base	Weight	Code	Price Each
No. 155	7½ inches	5 x 5 inches	9 lbs.	YEFEE	$6.50

Packed one in a box.

No. 160 Grinding Head

Full Bronze Bearings



This is exactly the same as No. 150, with the addition of a very substantial set of work rests adjustable in three directions, a heavy set of wheel guards and glass spark guards set in a metal frame. These spark guards can be moved aside when wheels are being changed or can be removed entirely if desired.

Accommodates wheels up to 6 inches in diameter with 1-inch face and ½-inch hole.

Frame finished in battleship gray and red enamel. Flanges nickel plated and buffed.

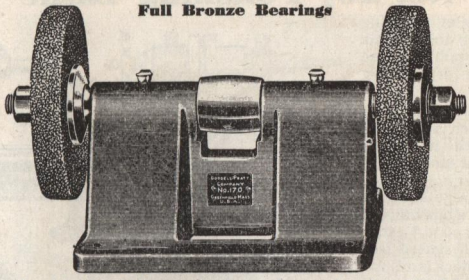
No wheels furnished.

	Height	Base	Weight	Code	Price Each
No. 160	7½ inches	5 x 5 inches	25 lbs.	YEGBF	$10.00

Packed one in a wooden box.

No. 170 Grinding Head

Full Bronze Bearings



A heavy head with a 1-inch spindle running in two bronze bearings 3 inches long. Wick-oiled from large reservoirs in the casting directly below the bearings and fed through spring top oilers. Diameter of wheel flanges, 3⅛ inches. Hardened steel flange nuts. Handles wheels up to 8 inches in diameter with 1¼-inch face and ¾-inch hole. Pulley, 2¼ inches in diameter with 2½ inches for flat belt. Can be driven from above, below or behind.

Frame finished in battleship gray enamel. Flanges nickel plated and buffed.

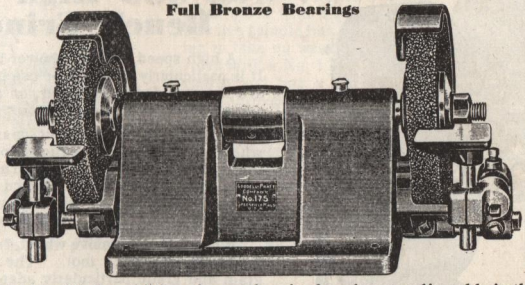
No wheels furnished.

	Height	Base	Weight	Code	Price Each
No. 170	5¼ inches	8 x 11 inches	27 lbs.	YEHCO	$13.50

Packed one in a wooden box.

No. 175 Grinding Head

Full Bronze Bearings



Same as No. 170, with the addition of a sturdy pair of work rests adjustable in three directions and a heavy pair of wheel guards. Guards accommodate wheels up to 7 inches in diameter with 1¼-inch face and ¾-inch hole. Pulley for flat belt has 2¼-inch diameter and 2½-inch face. Drives from below, above or behind.

Frame, guards and rests finished in battleship gray and red enamel. Flanges nickel plated and buffed.

No wheels furnished.

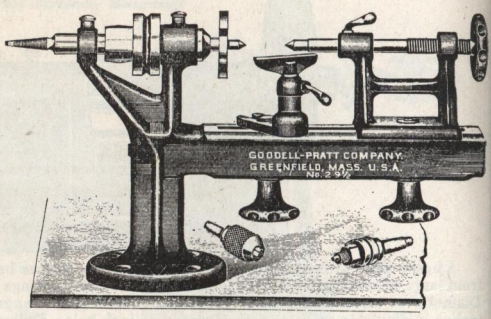
	Height	Base	Weight	Code	Price Each
No. 175	5¼ inches	8 x 11 inches	45 lbs.	YEIAL	$19.00

Packed one in a wooden box.

No. 29½ Polishing Lathe

A great variety of polishing and grinding can be done on this lathe that is not possible on the ordinary polishing or grinding head.

It is substantially constructed throughout. The bed is 12 inches long and is milled its entire length. The head stock has a spindle with a taper hole in both ends in which the regular equipment, consisting of a taper thread spindle, saw arbor, 0 to 5/32 inch capacity chuck and slotted face plate, fit. The tail stock is adjustable for position and is equipped with screw feed and clamp lock. The tee rest is adjustable for position and height.

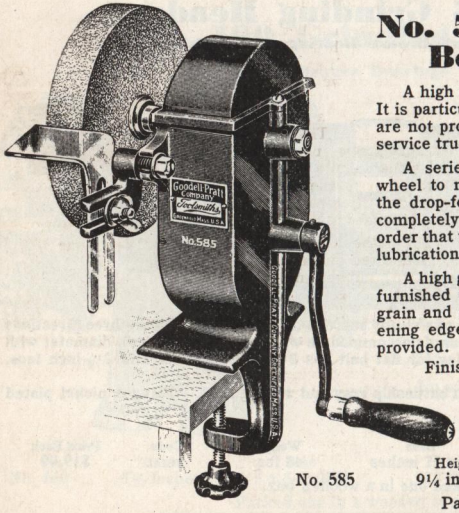


The pulley steps are 1 and 1 13/16 inches in diameter with ¾-inch face. Large step is grooved so round belt can be used if desired.

Frame, tail stock and tee rest nicely finished in red and black enamel. Steel parts are polished.

	Centers	Swing	Weight	Code	Price Each
No. 29½	3½ inches	5 inches	9½ lbs.	YAADT	$13.00

Packed one in a wooden box.



No. 585 High Speed Bench Grinder

A high speed and high power bench grinder. It is particularly adapted for use in shops which are not provided with power, on an automobile service truck, or in a contractor's tool house.

A series of machine-cut gears causes the wheel to make 22 revolutions to each turn of the drop-forged steel crank. These gears are completely inclosed and packed in grease in order that they may run silently and have proper lubrication.

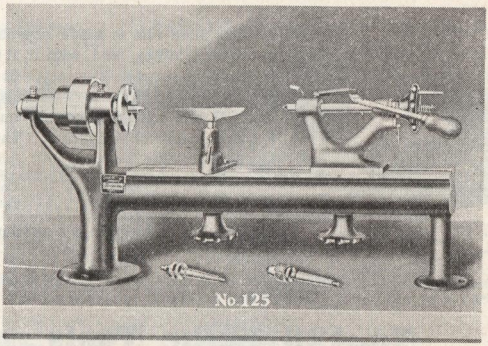
A high grade abrasive wheel, 7 x 1¼ inches, is furnished with each tool. The wheel is of a grain and grade particularly adapted for sharpening edge tools. An adjustable work rest is provided.

Finished in red and black enamel.

	Height	Code	Price Each
No. 585	9¼ inches	YUNOD	$15.00

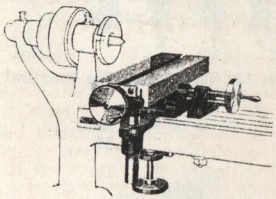
Packed one in a box.

Nos. 125 and 494 Bench Lathes



Thousands of these lathes have been installed in laboratories, cabinet shops, manual training departments, electrical servicing stations, garages and home workshops. Without exception they have rendered entire satisfaction even where the requirements demanded close performance on either metal or wood turning.

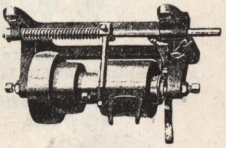
They are moderate in price, yet they are thoroughly serviceable, practical, and reasonably accurate. They are substantially constructed from good materials and are designed especially for experimenters, craftsmen, and designers. They will handle a wide range of work, making them particularly useful in laboratories, repair shops, and trade schools



No. 132 Slide Rest
See page 172

They have a milled bed and a tail stock with a milled base. The live spindle has a cone bearing to take up wear, and is provided with a No. 1 Morse Taper socket and has a ⅜-inch hole clear through. The tail stock has both screw and lever feed. Tail stock spindle has a No. 0 Morse Taper socket. The cone pulley has three steps, 1½, 2½, and 3½ inches in diameter.

The lathe is finished with black and red enamel, the bed is milled; all working parts are polished.



No. 130 Countershaft
See page 172

Every lathe is provided with an adjustable tee rest, a slotted face plate, a saw arbor, and a drill chuck with a No. 1 Morse Taper shank. The chuck holds round shanks of all sizes from 0 to ¼ inch. Both the head stock and the tail stock are provided with point centers.

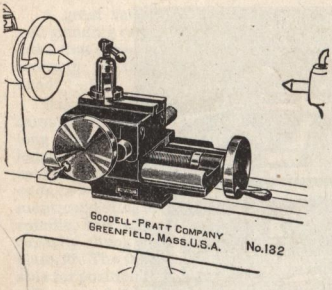
A ¼ H. P. or larger motor is recommended for driving these lathes.

Scroll chucks for use on these lathes will be found on page 119. Other attachments on the pages immediately following.

	Centers	Swing	Length	Weight	Code	Price Each
No. 125	12 inches	7 inches	25 inches	30 lbs.	YEBWA	$23.00
No. 494	18 inches	7 inches	31 inches	36 lbs.	YOURD	27.50

Packed one in a wooden box.

No. 132 Slide Rest

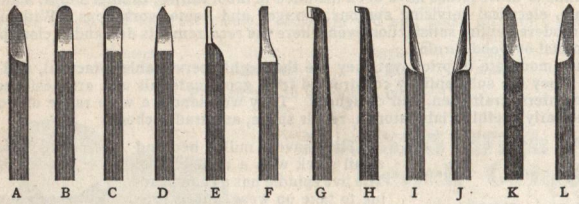


This slide rest is made especially for use with our bench lathes, and, with it, it is possible to do work of reasonable accuracy. It is a strong and thoroughly well made device although not a precision tool. It has a longitudinal motion of 3¾ inches and a cross motion of 2¼ inches. The tool post holds ¼ x ¼ inch lathe tools.

	Weight	Code	Price Each
No. 132	6½ lbs.	YECIB	$13.20

Packed one in a wooden box.

No. 126 Lathe Tools



These lathe tools are made especially for use with our No. 132 Slide Rest. The tools are about 3 inches long by ¼ inch square.

	Code	
Price, per set of twelve	YEBYE	$4.20
Price, each		.35

Packed one set in a box.

No. 130 Countershaft

This countershaft for use with our bench lathes is so arranged that a treadle can be attached to the pull. The belt is held on the tight pulley as long as pressure remains on the treadle. Diameter of tight and loose pulleys, 2¾ inches. Cone pulley has three steps, 1½, 2½, and 3½ inches in diameter, 1⅛ inches in width.

	Steps	Weight	Code	Price Each
No. 130	1½, 2½, 3½ inches	10 lbs.	YECEZ	$7.70

Packed one in a wooden box.

Attachments for Bench Lathes

No. 134 Wood Center

Diameter, ⅜ inch, for use in Tail Stock. Shank No. 0 Morse Taper.
Price, $0.65

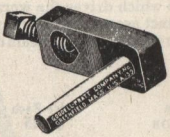
No. 135 Spur Center

One inch in diameter for wood turning. Shank No. 1 Morse Taper.
Price, $1.10

No. 137 Square Center

Made of Tool Steel for light turning of wood or steel. Shank No. 1 Morse Taper.
Price, $1.10

No. 139 Lathe Dog

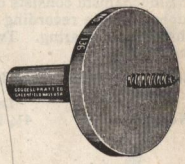


Capacity, 1/16 to ⅜ inch; 1 1/16 inches long, 9/16 inch wide and 5/16 inch thick. Driving Pin, ¼ inch diameter, 1 3/16 inches long.
Price, $0.65

No. 131 Interchangeable Centers and Shank

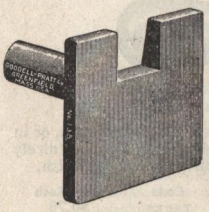
For use in Tail Stock. 1 Cone, 1 Cup, and 1 V Center, all ¾ inch outside diameter. One Shank No. 0 Morse Taper fitting all centers.
Price, per set, $1.65

No. 136 Screw Center Face Plate



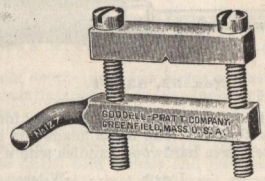
Diameter, 1 13/16 inches. Screw projects ½ inch. Shank No. 1 Morse Taper.
Price, $1.30

No. 138 Table Rest



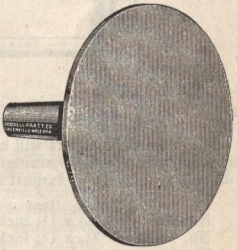
For use in Tool Rest. Two inches square. Shank, ½ inch.
Price, $0.90

No. 127 Clamp Dog



Double Screw Clamp for holding stock of odd shapes. Opens ⅞ inch.
Price, $0.90

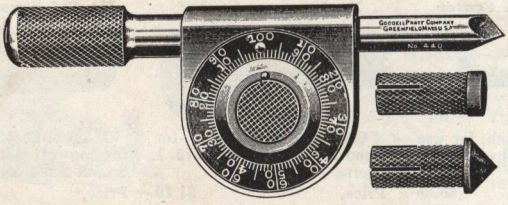
No. 133 Tail Stock Face Plate



Diameter, 3 inches. Shank No. 0 Morse Taper.
Price, $1.10

No. 440 Speed Indicator

Superseding Indicators Nos. 387 and 449



A very useful, easily operated indicator selling at a low price and having many sterling features.

The fixed dial is graduated both ways so that the speed of clockwise or counter-clockwise shafts can be read directly. The rotating dial is quickly set to 0 by merely turning the knurled thumb screw to the left and tightening after the setting has been made.

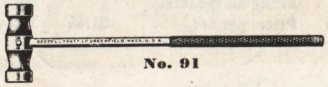
The mechanism consists of a burnished worm cut on the steel spindle which drives the worm gear operating the recording dial. The spindle is hardened and the contact pressure is taken up on a ball thrust bearing. Two rubber tips are furnished, one for centered and one for plain or pointed shafts.

Entire tool finely polished, nickel plated and buffed.

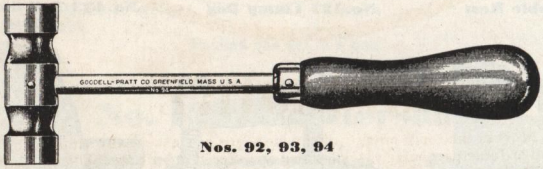
	Length	Weight	Code	Price Each
No. 440	4¼ inches	6 ozs.	YOMOB	$1.25

Packed one in a box.

Nos. 91-94 Brass Hammers



No. 91

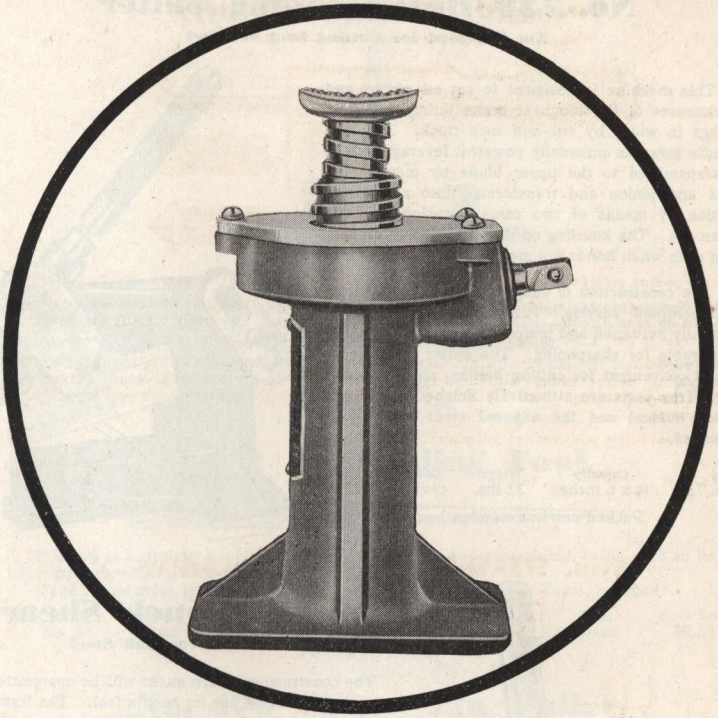


Nos. 92, 93, 94

These brass hammers will be found convenient and practical for use on finished work, or in any place where a soft hammer is desired. The brass heads and steel shanks are both nicely polished, and the three largest sizes have hardwood handles with a mahogany lacquer finish.

	Head	Length	Weight	Code	Price Each
No. 91	½ x 1½ inches	5½ inches	2 ozs.	YAURN	$0.70
No. 92	9/16 x 1¾ inches	7¼ inches	4 ozs.	YAUXT	.80
No. 93	¾ x 2¼ inches	8 inches	8 ozs.	YAVEN	1.00
No. 94	1 x 3 inches	10 inches	16 ozs.	YAVMA	1.20

Packed one in a box.



AUTOMOTIVE

Most of the tools on the next few pages are essentially Automotive Tools, particularly jacks, which are offered in both mechanical and hydraulic types.

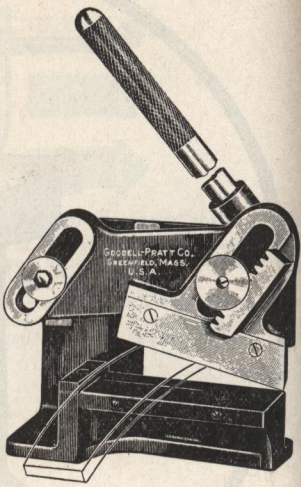
Other tools in the line that are widely used in the automotive field include automatic, ratchet and plain screw drivers, hand, breast and electric drills, cold chisels and punches, tap holders, chucks, hack saw blades and frames, hole saws, wire wheel brushes, polishing and grinding heads, brass hammers and machinists' tools including rules, thickness gauges, calipers and dividers, inside and outside micrometers and other items, all of which can be easily located by referring to the index on pages 238, 239 and 240.

No. 739 Brake Lining Cutter

Not Designed for Cutting Iron or Steel

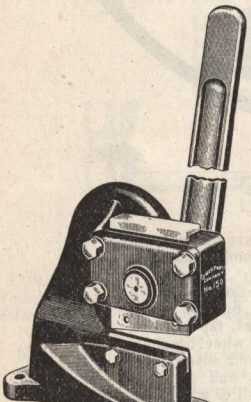
This machine is designed to cut all widths and thicknesses of the toughest brake lining up to six inches in width by one-half inch thick. The long handle gives an unusually powerful leverage, which is transmitted to the upper blade by means of a rack and pinion and transformed into a shearing motion by means of two cams, insuring an easy, clean cut. The knurling on the handle gives an easy grip even when hands are greasy.

The construction is simple and rugged, insuring uninterrupted service. The blades are made of carefully hardened and tempered steel and are easily removable for sharpening. The cutter will also be found convenient for cutting belting, shim material, etc. Iron parts are attractively finished in red and black enamel and the exposed steel parts nicely polished.



	Capacity	Weight	Code	Price Each
No. 739	½ x 6 inches	33 lbs.	ZAVHA	$22.00

Packed one in a wooden box.



No. 150 Bench Shear

For Cutting Iron and Steel

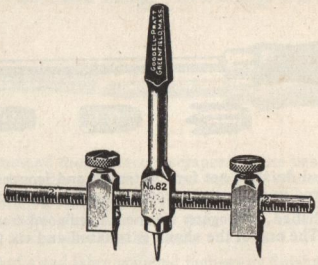
The construction of this shear will be appreciated by every one having use for such a tool. The frame is so designed that sheets of any width can be readily cut. The lever is 20 inches long, and the tool steel blades have 4-inch cutting edges. All iron parts are finished in red and black enamel; steel parts are polished. Net weight, 31 pounds.

Although the opening is 9/16 inch at the front, no iron or steel larger than 3/16 inch round or flat should be cut. This machine will also be found useful for cutting brake lining. Not intended to cut tempered steel.

	Capacity	Weight	Code	Price Each
No. 150	3/16 x 4 inches	38 lbs.	YEEVS	$24.00
Extra blades, per set				6.60

Packed one in a wooden box.

No. 82 Gasket Cutter



A new and improved cutter with hardened and tempered tool steel cutters and point, both of which are easily replaceable. Heavy graduated steel beam flattened on top to give a good bearing for the knurled set screws. Hardened square bit brace shank.

	Capacity	Weight	Code	Price Each
No. 82	⅝ to 6 inches	10 ozs.	YADVT	$2.30

Packed one in a box.

No. 2 Assembling Tool

This tool is especially useful in automobile repairing and assembling, being used to line up holes through which pins, bolts, screws, etc., are to be placed.

Made of tool steel, spring tempered. Handle, heavily knurled. Taper, polished.

	Body	Point	Length	Weight	Code	Price Each
No. 2	½ inch	3/16 inch	10 inches	6 ozs.	NEEDY	$0.55

Packed six in a box.

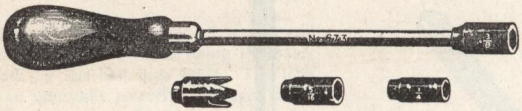
No. 479 Cotter Pin Puller

This cotter pin puller is forged from a high grade of ⅜-inch hexagon tool steel, carefully hardened, ground, and tempered.

	Length	Weight	Code	Price per Dozen
No. 479	8 inches	3½ ozs.	YOSBE	$4.80

Packed twelve in a box.

No. 673 Socket Wrench



A finely manufactured and finished set for tightening and loosening the small hexagon nuts and thumb screws encountered in radio and electrical appliances and equipment.

The set consists of a polished, mahogany finished, hardwood handle, with a polished steel shank ¼ inch in diameter. The end of the shank is squared and slit to hold the sockets securely when it is sprung into them.

Four sockets are furnished: one each for hexagon nuts measuring ⅜, 5/16, and ¼ inch between flats, and a four-jawed socket for handling knurled thumb screws such as found on dry cells, etc. The sockets are deeply drilled to accommodate screw ends and the hexagon portion accurately broached to size. The sockets are steel, well case-hardened.

	Length	Weight	Code	Price Each
No. 673	8½ inches	4 ozs.	ZAIRG	$1.00

Packed one set in a carton.

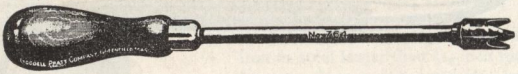
No. 674 Tool Set

This convenient set consists of a complete No. 673 radio wrench set, as described above, and one each, No. 355 6½-inch screw driver and No. 331 8-inch screw driver. These screw drivers will be found fully described on page 67.

	Weight	Code	Price per Set
No. 674	7 ozs.	ZAJAT	$2.30

Packed one set in a box.

No. 764 Prong Wrench



This is the same handle and shank used in the No. 673 set above, with a four-jawed socket for thumb nuts solidly affixed for handling small, round, knurled thumb nuts.

	Length	Weight	Code	Price Each
No. 764	8½ inches	3 ozs.	ZAZPO	$0.30

Packed six in a box.

Bearing Scrapers

We unreservedly recommend these bearing scrapers as the best made. The slightly curved, tapering, and recessed blade is designed to do nice scraping without chattering.

The blades are forged from a very high grade of tool steel correctly hardened and so carefully tempered that they will scratch glass and hold their keen razorlike edge over a long period. After being dulled by long usage they can be easily sharpened by a few strokes on an oil stone.

The polished round shanks and large polished mahogany finished handle make a most attractive tool and a comfortable one to use.

	Cutting Edge	Length Overall	Code	Price Each
No. 581	1½ inches	8 inches	YUNDO	$0.55
No. 381	2½ inches	10 inches	YOCYP	.80
No. 382	3½ inches	11 inches	YODAK	.85
No. 383	4½ inches	12 inches	YODEL	.90

Packed six in a box.

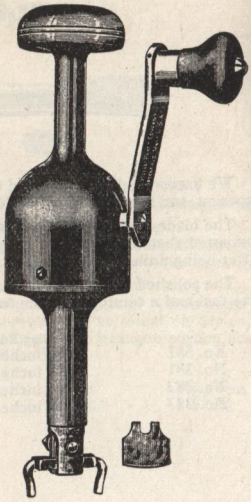
Bearing Scraper Sets

No. 740

These sets consist of assortments of the bearing scrapers above, as follows:

	One Each	Code	Price per Set
No. 740A Set	Nos. 581-381-382	ZAVIT	$2.15
No. 740 Set	Same in Flexible Leather Case	ZAVIK	3.15
No. 471 Set	Nos. 381-382-383	YORCO	2.50

Packed one set in a box.



No. 288 Valve Grinder

With Reciprocating Motion

These tools will be found a great convenience in grinding automobile valves. By means of a simple operating mechanism, the spindle is caused to rotate back and forth when the crank is turned continuously in one direction.

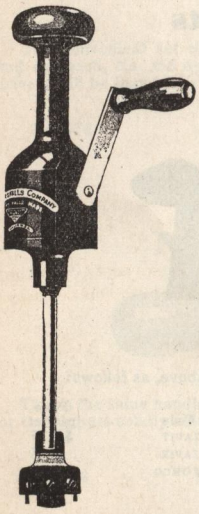
The tools are designed to have sufficient weight so that additional pressure need not be applied to the valve seat.

Both an adjustable spanner and a blade are provided with each of these tools in order that they may be used on different types of cars.

Frame finished in red and black enamel. Head and handle mahogany finished hardwood.

	Height	Weight	Code	Price Each
No. 288	10¼ inches	3¾ lbs.	YIFAG	$4.00

Packed one in a box.



No. 238 Valve Grinder

With Progressive Reciprocating Motion

An improved tool which simplifies the grinding of automobile valves. Forward turns of the crank cause grinding head to reciprocate and make one complete revolution to ten turns of the crank. This progressive recriprocating motion insures a perfect face on both the valve and valve seat resulting in tight seating and high compression.

Ball bearings insure free action and increase its power.

Universal in its use as spanner points are adjustable and the flat blade is used for slotted valve heads.

Steel gears and crank handle, iron frame enameled black. Head of stained hardwood, shaped to give firm, comfortable grip.

	Height	Weight	Code	Price Each
No. 238	13⅜ inches	2½ lbs.	NATAL	$3.40

Packed one in a box.

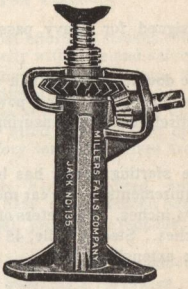
No. 135 Double Screw Jack

1 Ton Capacity

A sturdy, well built jack with a new low minimum height to meet the requirements of the new low slung light cars.

It is of the double lift screw type, both screws operating in unison. It is guaranteed to lift loads within its capacity quickly and easily. Dimensions of base, 4¾ x 3¼ inches. Diameters of screws, 1 3/16 inches and ¾ inch.

Fitted with a new 42-inch steel handle of the folding, extensible type.

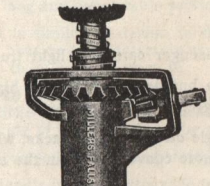


	Capacity	Minimum Height	Maximum Lift	Weight with Handle	Code	Price Each
No. 135	1 ton	6 inches	5¾ inches	8 lbs.	YECPY	$3.00

Packed one in a box.

No. 115 Double Screw Jack

1½ Ton Capacity



A dependable, safe jack with double screws that act in unison and that will handle any load within its capacity quickly and easily.

Long 42-inch steel handle is of the folding, extensible type. It is set at a low angle to afford easy and convenient operation.

Dimensions of base, 4¾ x 3½ inches. Diameters of screws, 1½ inches and 1 inch.

	Capacity	Minimum Height	Maximum Lift	Weight with Handle	Code	Price Each
No. 115	1½ tons	7⅜ inches	9¾ inches	9½ lbs.	YEADO	$5.00

Packed one in a box.

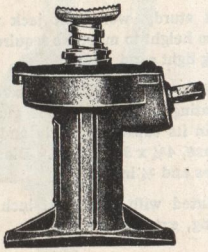
No. 140 Double Screw Jack

2 Ton Capacity

Designed for heavy passenger cars and light trucks.

The double screws act in unison to lift the load quickly and easily. The powerful reduction gears are entirely enclosed, insuring free, smooth operation.

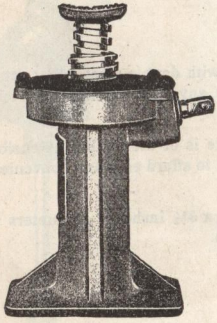
The starting height has been lowered to meet the requirements of new car models. Base measures, 5½ x 3¼ inches. Diameters of screws, 1½ inches and 1⅛ inches. Steel handle, 48 inches long of the telescopic extensible type.



	Capacity	Minimum Height	Maximum Lift	Weight with Handle	Code	Price Each
No. 140	2 tons	6 inches	6¾ inches	11 lbs.	YEDHO	$7.00

No. 130 Double Screw Jack

2 Ton Capacity



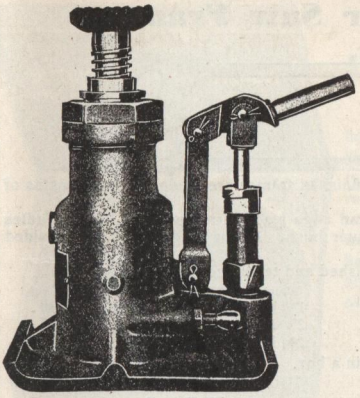
Designed for heavy passenger cars and light trucks.

Same as No. 140 above but heavier and with higher minimum height and much greater lift.

Note the low handle angle on both these jacks, which makes their operation far more convenient than the ordinary jack.

Long 48-inch steel handle of the telescopic extensible type. Base, 5¼ x 3¼ inches. Diameters of screws, 1¾ inches and 1⅛ inches.

	Capacity	Minimum Height	Maximum Lift	Weight with Handle	Code	Price Each
No. 130	2 tons	6¾ inches	10 inches	10½ lbs.	YECDA	$7.00



No. 180 Hydraulic Jack

7 Ton Capacity

Requiring almost effortless strokes this jack will lift to its capacity with ease and safety.

To lower, it is but necessary to turn the release valve by means of the handle.

The castings are of the finest while the steel ram is accurately fitted into a honed cylinder to insure satisfactory service. Valves are positive.

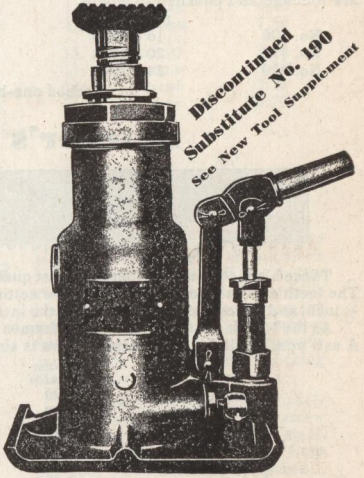
Equipped with hand-operated auxiliary screw, broad sled base, and extension handle.

Handle is steel, jointed, extensible to 36 inches.

Nicely finished in gray and red enamel.

Dimensions of base, 5¼ x 7½ inches.

	Capacity	Minimum Height	Maximum Height	Ram Lift	Screw Extension	Weight with Handle	Code	Price Each
No. 180	7 tons	9 inches	18½ inches	5½ inches	4 inches	22 lbs.	YEJES	$22.00



Discontinued
Substitute No. 190
See New Tool Supplement

No. 185 Hydraulic Jack

12 Ton Capacity

A powerful jack, designed for heavy duty and long and dependable service.

It is similar in design to the No. 180, but with heavier parts to amply care for the heavy loads to be imposed upon it.

The pump is positive in its action, requiring but little effort while the release valve permits lowering of loads gently to the ground.

Equipped with hand-operated auxiliary screw.

Handle is steel, extensible to 36 inches.

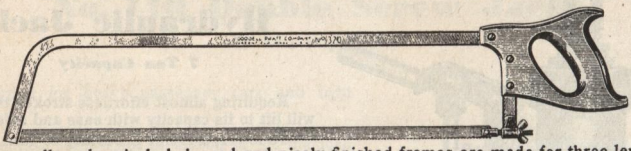
Nicely finished in gray and red enamel.

Dimensions of base, 5¾ x 7¾ inches.

	Capacity	Minimum Height	Maximum Height	Ram Lift	Screw Extension	Weight with Handle	Code	Price Each
No. 185	12 tons	12 inches	22¾ inches	7½ inches	3¼ inches	32 lbs.	YEKJE	$30.00

Packed one in a box.

No. 320 Butcher Saw Frames



These well made, nicely balanced and nicely finished frames are made for three lengths of blade—16, 20 and 24 inches.

The frames are made of ¾ inch x ¼ inch round edge steel, nicely polished. The handles are comfortably shaped hardwood with natural lacquer finish. Heavy wing nut and stud provided to insure ample tension on the blade.

Each frame is equipped with a fine quality, polished and tempered ⅝-inch blade.

	Length Blade	Throat	Weight	Code	Price Each
No. 320	16 inches	5 inches	1¾ lbs.	YILIT	$1.20
No. 320	20 inches	5 inches	2 lbs.	YILJY	1.45
No. 320	24 inches	5 inches	2⅜ lbs.	YILKO	1.70

Packed one in a box.

No. 420 Butcher Saw Blades

Made from the finest quality of spring steel, ⅝-inch wide, tempered, ground and polished. The teeth are filed, set and re-filed after setting, making a very free, fast-cutting blade. Ends are rounded and punched to length.

	Length Blade	Width	Code	Price per Dozen
No. 420	16 inches	⅝ inch	YOJJO	$1.70
No. 420	20 inches	⅝ inch	YOJKY	2.20
No. 420	24 inches	⅝ inch	YOJMA	2.60

Packed one-half gross in a box.

Butcher's Saw Blades

These blades are made from the finest quality of spring steel, tempered, ground, and polished. The teeth are filed, set, and re-filed after setting. We make these blades in three widths, ⅝ inch, ¾ inch, and 1 inch; all with 11 teeth to the inch.

As the length of different makes of frames varies considerably, these blades are not punched. A saw punch suitable for punching them is shown on the opposite page.

Length Blade	Per Dozen ⅝-inch wide	Per Dozen ¾-inch wide	Per Dozen 1-inch wide
12 inches	$1.90	$2.00	$2.30
14 inches	2.10	2.20	2.50
16 inches	2.40	2.50	3.00
18 inches	2.70	3.00	3.40
20 inches	3.10	3.30	4.00
22 inches	3.40	3.70	4.30
24 inches	3.70	4.00	4.70
26 inches	4.00	4.20	5.00
28 inches	4.20	4.50	5.20

Packed one-half gross in a box.

Butcher's Saw Coils

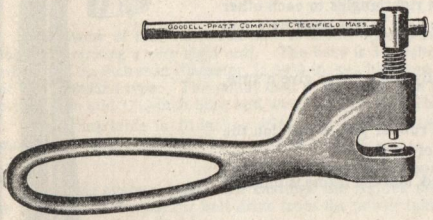
These butcher's saws are made from the finest quality of spring steel, tempered, ground, and polished. The teeth are filed, set, and re-filed after setting, and are consequently ready for immediate use. The teeth are correctly shaped for free cutting. They can be re-filed, but their first cost is so low that it is hardly profitable. Nothing that we can say about these saws will be so convincing as an actual trial.

Put up in 25 and 50 foot coils as follows:

	Length	Weight	Width	Teeth per Inch	Code	Price per Coil
No. 310	50 feet	2 lbs.	½ inch	13	YIJON	$6.00
No. 311	50 feet	2½ lbs.	⅝ inch	11	YIJUP	6.00
No. 312	50 feet	3¼ lbs.	¾ inch	11	YIKAL	6.40
No. 313	50 feet	4 lbs.	1 inch	11	YIKEM	7.50
No. 250	25 feet	1 lb.	½ inch	13	YIAHJ	3.00
No. 251	25 feet	1¼ lbs.	⅝ inch	11	YIALM	3.00
No. 252	25 feet	1¾ lbs.	¾ inch	11	YIANP	3.20
No. 253	25 feet	2¼ lbs.	1 inch	11	YIAST	3.75

Packed one in a box.

No. 200 Saw Punch



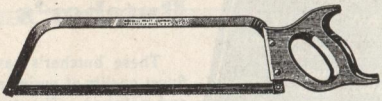
There is so much variation in the sizes of various styles of butcher's saw frames that most of the better class of butcher's saw blades or coils are not punched when they leave the factory. All dealers in and users of these blades will find this inexpensive device very convenient for punching the necessary holes.

The frame is made of nickel-plated, malleable iron. The screw and crossbar are polished steel. The punch and die are made from fine tool steel, carefully tempered.

	Size Hole	Length	Weight	Code	Price Each
No. 200	11/64 inch	5¾ inches	7 ozs.	YEMAJ	$1.00

Packed one in a box.

No. 83 Kitchen Saw



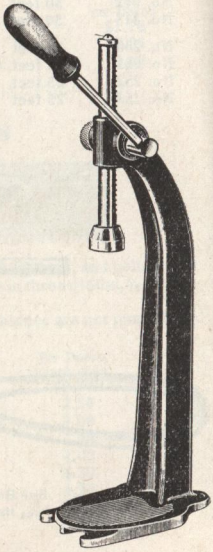
A well made, very low priced saw for use in the home for preparing various cuts of meat and cutting bones. The frame is made of ½ inch x 3/16 inch round edge steel. The handle is made of selected hardwood with a natural lacquer finish.

Each frame is equipped with a polished and tempered blade, 14 inches long and ½ inch wide which is filed and set for fast, free cutting.

	Length Blade	Weight	Code	Price Each
No. 83	14 inches	1¼ lbs.	YASIR	$0.60
Extra Blades, per Dozen			YASFA	1.50

Packed one frame in a box: six dozen blades in a box.

No. 3 Bottle Capper



A simple, sturdy, well designed machine at a low price.

The frame is a heavily webbed selected casting that affords ample strength where most needed. The pinion and rack gears are machine cut from solid steel stock and carefully hardened to withstand wear and prevent breakage.

The height of the cap seal is easily and positively adjusted for any height of bottle by running the capping member up or down to the desired position and then slipping the lever into the pinion shaft at the proper angle. The length and position of the lever is quickly adjusted as two holes at right angles to each other are provided in the shaft. The lever is held in the shaft by a ball spring friction.

The seal cap is hardened and carefully designed to give a sure, tight seal.

The base is fitted with a corrugated rubber pad to cushion the capping pressure and prevent breakage of bottles.

All steel parts are heavily nickel plated, and the frame is finished in bright red lacquer.

	Height Frame	Weight	Code	Price Each
No. 3	16 inches	6 lbs.	EHCOL	$1.30

Packed one in a box.

No. 28 Tilting Table Saw

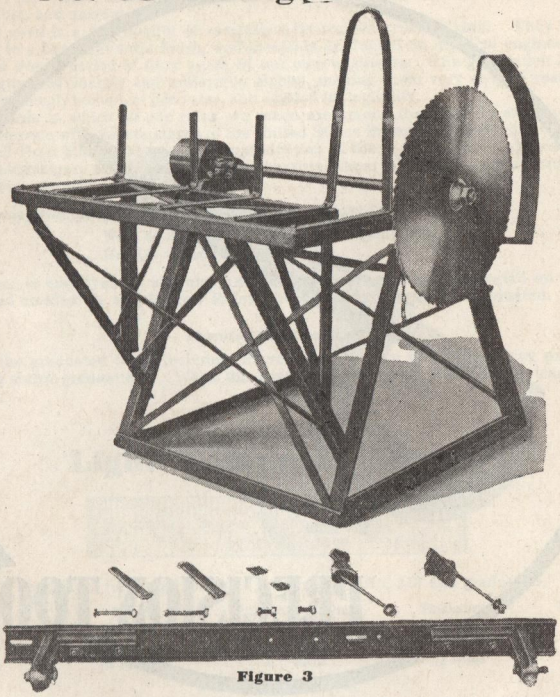


Figure 3

The frame of this cordwood saw is made up of structural steel solidly welded and bolted together, making a very rigid unit. The base is 37 inches wide and 39 inches deep. The shaft, which is 1 7/16 inches in diameter, is 34½ inches between the bearings, which are 1 7/16 x 4 inches of the babbitted type. The pulley cast solid to act as a fly-wheel is 7 inches in diameter with a 6-inch face and 1 7/16-inch bore and weighs 55 pounds. The saw supplied is 28 inches in diameter.

The tilting table is 16 inches wide and 42 inches long and is pivoted to the front legs. Its movement can be adjusted by means of a chain.

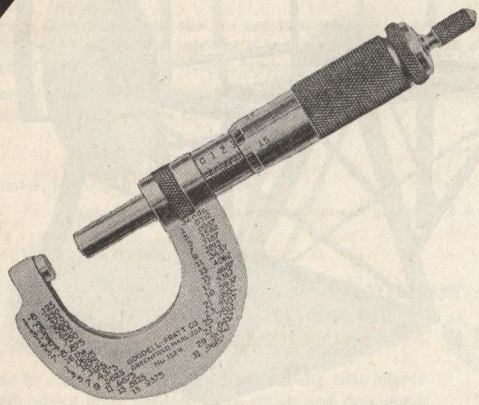
Tractor Attachment

With this channel beam and castings the frames described above can be fastened directly to any make of tractor for belt drive from the power take-off pulley.

Entire frame finished in green enamel.

		Weight	Code	Price Each
No. 28	Complete with 28-inch Saw	204 lbs.	WYZVO	$33.00
No. 28	Without Saw	184 lbs.	WYZWA	27.00
No. 35	Tractor Attachment	20 lbs.	WACVE	4.00

Shipped knocked down.



PRECISION TOOLS

The Goodell-Pratt line of Precision Tools as now constituted includes all the essential tools for the ordinary requirements of the skilled machinist, diesinker, or toolmaker.

Their accuracy, which is unreservedly guaranteed, is unfailingly maintained at any cost and is responsible for the fine reputation these tools have built up during the years. Goodell-Pratt Precision Tools can be purchased with every assurance that their accuracy, workmanship, and finish are unsurpassed.

Several new items have been added to the line and some of the slower moving items eliminated entirely. Every item is a live item, vital to both the machinist and to the distributor

GREENFIELD, MASSACHUSETTS

Tempered Steel Rules

"Goodell-Pratt" Steel Rules are made in a wide variety of styles, including light, semi-flexible, flexible, and narrow.

The steel used is a fine quality of carefully heat-treated crucible steel. They are ground and polished to a beautiful satin finish, and precisely graduated on dividing engines developed and perfected over a period of forty years by our own engineers. The graduation lines are of different lengths and sharply and uniformily etched, making them very easy to read correctly. The figures are deeply etched, of good size, and shaded for legibility.

The standards to which all our rules are made are among the finest in existence, and are checked at intervals with the standards of the United States Bureau of Standards at Washington. Every Goodell-Pratt Rule is as perfect a reproduction of these standards as skilled mechanics and precision machinery can produce, and we guarantee them to be as close to absolute accuracy as it is possible, commercially, to make them.

The following standard English graduations are employed:

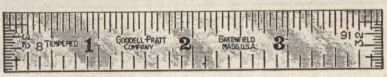
No. 4—8ths, 16ths, 32nds, and 64ths inch.
No. 10—32nds and 64ths inch.

The former is employed on all rules and square blades that are graduated on four edges. No. 10 is used on Flexible and Narrow Rules where only two edges are graduated.

Metric Graduations

Most of the graduated tools, including micrometers, shown on the following pages can be supplied with metric graduations. When this graduation is desired, it should be clearly specified on the order.

Light Tempered Rules



Graduated full length in No. 4 graduation. No. 213 end graduated.

	Length	Approximate Width	Thickness	Price Each
No. 213	6 inches	¾ inch	1/20 inch	$0.90
No. 215	12 inches	1 inch	1/16 inch	1.65
No. 216	18 inches	1 inch	1/16 inch	2.60

Packed six in a box.

Semi-Flexible Tempered Rules

Graduated full length in No. 4 graduation. No. 253 end graduated.

	Length	Approximate Width	Thickness	Price Each
No. 253	6 inches	5/8 inch	1/50 inch	$0.90
No. 255	12 inches	¾ inch	1/50 inch	1.65

Packed six in a box.

Flexible Tempered Rules

Graduated full length in No. 10 graduation. No. 264 end graduated.

	Length	Approximate Width	Thickness	Price Each
No. 264	6 inches	5/8 inch	1/100 inch	$0.90
No. 266	12 inches	5/8 inch	1/100 inch	1.65

Packed six in a box.

Light Tempered Rule

Numbered for Quick Reading

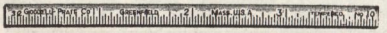
This 6-inch rule is the same as our No. 213. For fast reading the 64th graduations are numbered at each 8th graduation line.

Graduated full length No. 4 graduation. No end graduations.

	Length	Approximate Width	Thickness	Price Each
No. 866	6 inches	3/4 inch	1/20 inch	$0.90

Packed six in a box.

Narrow Tempered Rule



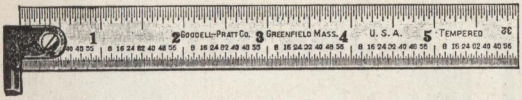
Graduated full length in No. 10 graduation.

	Length	Approximate Width	Thickness	Price Each
No. 274	6 inches	1/4 inch	1/20 inch	$0.85

Packed six in a box.

Tempered Hook Rule

Numbered for Quick Reading



Designed for taking measurements over rounded corners, through hubs of wheels or pulleys, or for setting dividers or inside calipers and many similar uses.

The hardened steel hook is locked on to the rule by a hardened eccentric bolt and is easily detachable when not wanted.

Graduated full length in No. 4 graduation with the 64th graduations numbered at each 8th graduation line.

	Length	Width	Thickness	Code	Price Each
No. 966	6 inches	¾ inch	1/20 inch	ZIJJO	$1.25

Packed one in a box.

Narrow Hook Rule

Similar to the hook rule above, but with a narrow tempered rule and a smaller hook.

Graduated full length in No. 10 graduation.

	Length	Width	Thickness	Code	Price Each
No. 771	6 inches	⅜ inch	1/20 inch	ZEAMD	$1.20

Standard Tempered Rule

Made of the finest quality of tempered rule steel with plain, deeply etched graduations and large, clear figures. One end of the rule is rounded and provided with a hole so that it can be hung up when not in use.

Graduated in 8ths and 32nds of an inch on one side.

	Length	Width	Thickness	Price Each
No. 763	6 inches	¾ inch	1/20 inch	$0.35

Packed six in a box.

No. 106 Flexible Steel Rule

A high grade, precision 6-inch flexible steel rule in every sense of the word.

Made of carefully heat-treated crucible steel with ground edges and precisely and clearly etched graduations in 16ths and 32nds of an inch.

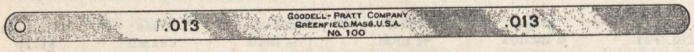
Each rule is mounted on an attractive gold card printed in red and black and packed in a moisture-proof cellophane envelope.

	Length	Width	Thickness	Price Each
No. 106	6 inches	5/8 inch	1/100 inch	$0.50

Packed six in a box.

No. 100 Thickness Stock Strips

Twelve Sizes, 12 Inches Long



For the automotive mechanic or toolmaker feeler stock in these convenient 12-inch strips is a decided convenience and economy. They are used extensively for setting ignition points, spark gaps, valve tappets and checking ring clearances, piston clearances, gear play, etc. They are equally valuable to the machinist and toolmaker for a great variety of purposes.

They are made in twelve different thicknesses: .0015, .002, .003, .004, .005, .006, .007, .008, .010, .012, .013, and .015 inch of the finest obtainable stock ground to thickness within very close limits. The ends are nicely rounded and finished so that they are accurate and without any burred edges.

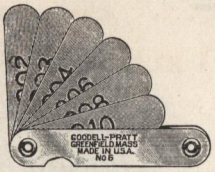
Each strip is very legibly etched with its thickness at two points and is protected from stain and rust by being packed in an individual cellophane envelope.

Size	Dimensions	Price per Foot	Size	Dimensions	Price per Foot
.0015	12 x ½ inch	$0.28	.007	12 x ½ inch	$0.20
.002	12 x ½ inch	.28	.008	12 x ½ inch	.17
.003	12 x ½ inch	.28	.010	12 x ½ inch	.17
.004	12 x ½ inch	.20	.012	12 x ½ inch	.17
.005	12 x ½ inch	.20	.013	12 x ½ inch	.17
.006	12 x ½ inch	.20	.015	12 x ½ inch	.17

Packed six in a substantial telescope box.

No. 6 Thickness Gauge

Six 2¼-Inch Leaves



A big value in a six-leaf precision gauge with a popular combination of thicknesses, namely .002, .003, .004, .006, .008 and .010 of an inch.

The leaves are made of the finest Swedish steel with the working ends carefully finished. The thickness is clearly etched on each blade. A double steel plate case is provided to protect the leaves when not in use.

Furnished mounted on the gold card (3½ x 4½ inches), printed in red and black, illustrated above, or six in a box.

		Leaves	Weight Box	Code	Price Each
No. 6	Mounted on card	2¼ x ½ inch	6 ozs.	WYGBO	$0.25
No. 6	Unmounted	2¼ x ½ inch	6 ozs.	WYGDE	.25

Packed six in a box.

No. 25 Thickness Gauge

Twenty-Five 2¼-Inch Leaves

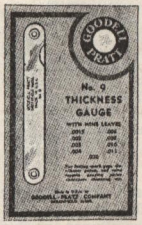
Same as No. 6 above, but with 25 leaves, namely: .0015, .002, .003, .004, .005, .006, .007, .008, .009, .010, .011, .012, .013, .014, .015, .016, .017, .018, .019, .020, 021, .022, .023, .024 and .025 inch thick.

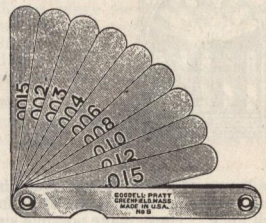
	Leaves	Weight Box	Code	Price Each
No. 25	2¼ x ½ inch	1 lb.	WYZCY	$1.00

Packed six in a box.

No. 9 Thickness Gauge

Nine 3½-Inch Leaves





With nine Swedish steel leaves, .0015, .002, .003, .004, .006, .008, .010, .013 and .020 of an inch thick, with the thickness clearly etched on each.

		Leaves	Weight Box	Code	Price Each
No. 9	Mounted on card	3½ x ½ inch	½ lb.	WYIDA	$0.40
No. 9	Unmounted	3½ x ½ inch	½ lb.	WYIFO	.40

Packed six in a box.

No. 569 Thickness Gauge

Six 2¼-Inch Leaves

This gauge is particularly adapted to the needs of the motor car owner and mechanic for use in setting valve tappets, timers, spark plug points, gauging shims, clearances, etc. It has six leaves, .002, .003, .004, .005, .010, and .015 inch thick, making possible in combination all thicknesses by thousandths from .002 to .039 (except .038).

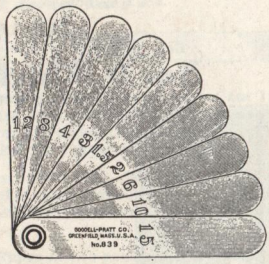
The leaves are ½ inch wide. There is no case or sides for this gauge; the leaves not in use forming the handle.

	Leaves	Code	Price Each
No. 569	2¼ x ½ inches	YULWA	$0.50
No. 569	Display with 15 gauges	YULXO	7.70

Packed ten in a box or one display in an envelope.

No. 839 Thickness Gauge

Nine 3 1/16-Inch Leaves



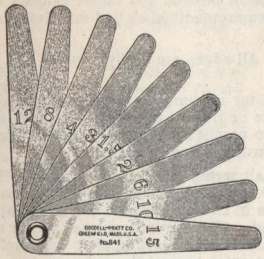
The nine leaves of this thickness gauge include all the most used sizes in automotive work and represent a very popular assortment, as follows: .0015, .002, .003, .004, .006, .008, .010, .012, and .015 inch thick. These make possible singly and in combination almost any thickness from .0015 to .0615 by half-thousandths of an inch.

	Leaves	Code	Price Each
No. 839	3 1/16 x ½ inch	ZEMAD	$0.70
No. 839	Display with 6 gauges	ZEMAT	4.20
No. 839	Display with 15 gauges	ZEMAX	10.50

Packed ten in a box or one display in an envelope.

No. 841 Thickness Gauge

Nine Tapered 3 1/16-Inch Leaves



The leaves of this gauge are made of the finest grade of special thickness gauge steel. They are nicely tapered for use in small spaces and the thickness of each is clearly etched on it. Great care is taken in finishing the ends to remove any burr so that they are accurate and sensitive.

It has nine leaves of the following thicknesses: .0015, .002, .003, .004, .006, .008, .010, .012, and .015 inch. These make possible singly and in combination almost any thickness by half-thousandths from .0015 to .0615.

	Leaves	Code	Price Each
No. 841	3 1/16 x 1/2 inch	ZEMEF	$0.75
No. 841	Display with 6 gauges	ZEMEL	4.50
No. 841	Display with 15 gauges	ZEMEO	11.25

Packed six in a box or one display in an envelope.

Nos. 359 and 480 Thickness Gauges

Nine and Twenty-Five 2 1/4-Inch Leaves

These gauges are made of the finest Swedish thickness gauge steel, ground to extreme accuracy and the working ends of the blades carefully finished. The thickness of each leaf is clearly etched on it. The leaves fold into a steel case. Length overall, 2 3/4 inches.

No. 359 has nine 2 1/4 x 1/2 inch leaves as follows: .0015, .002, .003, .004, .006, .008, .010, .012, and .015. These make possible singly or in combination most any thickness by half-thousandths from .0015 to .0615.

No. 480 has twenty-five 2 1/4 x 1/2 inch leaves, from .0015 to .025, which used singly or in combination give almost any thickness up to .3255 by half-thousandths.

	Number Leaves	Size Leaves	Code	Price Each
No. 359	9	2 1/4 x 1/2 inch	YIZOF	$1.35
No. 480	25	2 1/4 x 1/2 inch	YOSDO	2.50

Packed one in a box, 12 or 50 boxes in a carton.

Spring Calipers and Dividers

The pages immediately following show a very fine line of outside and inside calipers and dividers. They are designed to meet the most exacting requirements of skilled machinists and toolmakers.

The stock used is a fine grade of hard crucible steel. All edges are nicely rounded and the entire tool ground and polished to a beautiful finish.

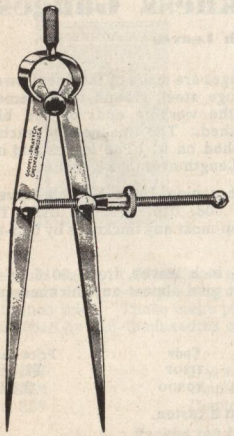
The shape of the legs and points has been developed for maximum accuracy in calipering of every description and for transferring measurements to or from a micrometer or steel rule within very close limits. Inside caliper legs are shaped to permit their use in unusually small spaces. Divider points are nicely tapered and carefully hardened and tempered.

Precisely machined and hardened screws are used on all spring calipers and dividers. The nuts are of two types, "solid" and "quick," both of which are hardened. Solid nuts are of ordinary construction. The threaded portion of quick nuts is made in two parts which are spread apart by a small spring when the pressure of the leg is removed. This disengages the threads and the nut can then be slipped over the entire length of the screw or any portion of it very rapidly and without turning it. The instant the leg is allowed to press against the nut it engages the screw thread again and the final adjustment is made by turning the nut in the usual manner.

Side deflection in calipers or dividers destroys their value for precise work, and the greatest care is used to eliminate it from these spring calipers and dividers. Accurately machined and hardened steel spools or fulcrum studs with a good wide face are used and the bearings in the legs are carefully fitted to them. These are held in close contact by stiff, heat-treated steel springs, making a very rigid tool.

Spring dividers have a finely knurled handle riveted to the spring to facilitate the describing of arcs and circles.

Spring Dividers



With Solid Nut

	Size	Code	Price Each
No. 513	3 inches	YUAJT	$0.85
No. 514	4 inches	YUASF	.90
No. 515	5 inches	YUBAM	1.00
No. 516	6 inches	YUBIP	1.05
No. 517	8 inches	YUBMA	1.35
No. 570	10 inches	YULYE	1.65
No. 571	12 inches	YUMAY	1.80

With Quick Nut

	Size	Code	Price Each
No. 613	3 inches	YUVNY	$1.05
No. 614	4 inches	YUVUM	1.10
No. 615	5 inches	YUWAJ	1.15
No. 616	6 inches	YUWIL	1.20
No. 617	8 inches	YUWYP	1.50
No. 670	10 inches	ZAHZY	1.80
No. 671	12 inches	ZAIFS	2.00

Packed three in a box.

Outside Spring Calipers

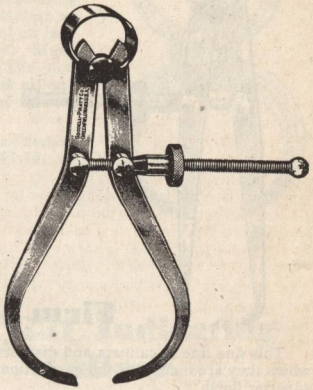
With Solid Nut

	Size	Code	Price Each
No. 501	3 inches	YOWEF	$0.85
No. 502	4 inches	YOWIG	.90
No. 503	5 inches	YOWOH	1.00
No. 504	6 inches	YOWYK	1.05
No. 505	8 inches	YOYFA	1.20
No. 550	10 inches	YUHET	1.65
No. 551	12 inches	YUHSA	1.80

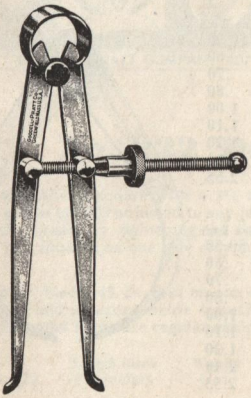
With Quick Nut

	Size	Code	Price Each
No. 601	3 inches	YURAD	$1.05
No. 602	4 inches	YURFE	1.10
No. 603	5 inches	YURIG	1.15
No. 604	6 inches	YURUJ	1.20
No. 605	8 inches	YUSEG	1.40
No. 650	10 inches	ZADVY	1.80
No. 651	12 inches	ZADYV	2.00

Packed three in a box.



Inside Spring Calipers



With Solid Nut

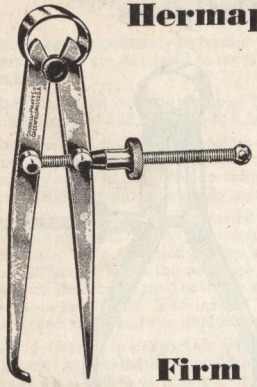
	Size	Code	Price Each
No. 507	3 inches	YOYUK	$0.85
No. 508	4 inches	YOYZM	.90
No. 509	5 inches	YOZHE	1.00
No. 510	6 inches	YOZMY	1.05
No. 511	8 inches	YOZOK	1.20
No. 560	10 inches	YUJEV	1.65
No. 561	12 inches	YUJOY	1.80

With Quick Nut

	Size	Code	Price Each
No. 607	3 inches	YUSYL	$1.05
No. 608	4 inches	YUTAG	1.10
No. 609	5 inches	YUTGA	1.15
No. 610	6 inches	YUTKO	1.20
No. 611	8 inches	YUVAH	1.40
No. 660	10 inches	ZAFUV	1.80
No. 661	12 inches	ZAFWY	2.00

Packed three in a box.

Hermaphrodite Spring Calipers



With Solid Nut

	Size	Code	Price Each
No. 540	3 inches	YUFER	$0.85
No. 541	4 inches	YUFTO	.90
No. 542	5 inches	YUFWY	1.00
No. 543	6 inches	YUGAR	1.10

With Quick Nut

	Size	Code	Price Each
No. 640	3 inches	ZACRO	$1.00
No. 641	4 inches	ZACTY	1.10
No. 642	5 inches	ZACUS	1.20
No. 643	6 inches	ZACYT	1.25

Packed three in a box.

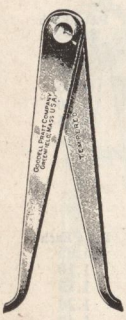
Firm Joint Calipers

This fine line of calipers and dividers is in demand on account of the excellent material from which they are made, the fine proportions of the legs, the adjustable tension of the joint and their superior finish.

They are made of spring tempered crucible steel, with all corners well rounded and the legs nicely proportioned. The points are carefully shaped for obtaining close, accurate measurements. The sizes given are the lengths of the legs, and their measuring capacity is considerably greater than their rated capacity.

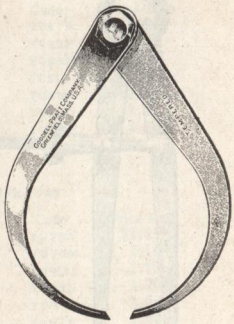
Any desired tension of the joint can be secured by adjusting the friction screw. This is provided with a hexagon head on all sizes so that any ordinary wrench can be used for the purpose.

The finish is unusually fine, every part being beautifully polished.



Outside

	Size	Code	Price Each
No. 400	3 inches	YOGAM	$0.50
No. 401	4 inches	YOGIP	.60
No. 402	5 inches	YOGMA	.70
No. 403	6 inches	YOGNE	.80
No. 404	8 inches	YOGSY	1.00
No. 405	10 inches	YOGUR	1.10
No. 406	12 inches	YOGYS	1.20
No. 408	16 inches	YOHEP	2.10
No. 409	18 inches	YOHOR	2.55

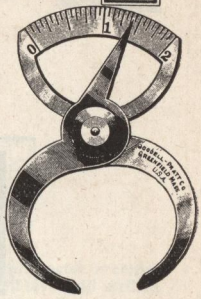


Inside

	Size	Code	Price Each
No. 420	3 inches	YOJOS	$0.50
No. 421	4 inches	YOJPA	.60
No. 422	5 inches	YOJSO	.70
No. 423	6 inches	YOJUT	.80
No. 424	8 inches	YOJVY	1.00
No. 425	10 inches	YOJYV	1.10
No. 426	12 inches	YOKER	1.20
No. 428	16 inches	YOKTO	2.10
No. 429	18 inches	YOKUV	2.55

Packed three in a box.

No. 662 Indicating Caliper



The most convenient little caliper ever made for measuring thicknesses over shoulders or otherwise, lengths and diameters up to 2 inches. The arc is accurately graduated in 16ths of an inch and the indicating point is nicely shaped for close readings. Made of hard crucible steel with a beautiful polished finish. The joint has a smooth, even friction. Measures only 3 inches over all and weighs only 1 ounce. Can be carried in the vest pocket without knowing it is there.

	Capacity	Code	Price Each
No. 662	2 inches	ZAGAR	$1.10

Packed three in a box.

No. 331 Indicating Caliper

This caliper is the same as No. 662 above, but not so highly finished, so that its price can be materially reduced. One of the handiest measuring tools ever introduced. Capacity, 2 inches.

Each caliper packed in a cellophane envelope and mounted on the attractive two-color card illustrated.

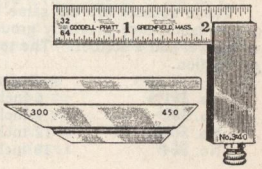
	Capacity	Code	Price Each
No. 331	2 inches	YIOKA	$0.50

Packed six in a box.

No. 222 Double Steel Square

A toolmaker's square with a 2½ x ½ inch sliding blade which can be quickly adjusted to any length, right or left, and securely locked by tightening the thumb nut in the beam. Blade is graduated on one side only in 32nds and 64ths of an inch.

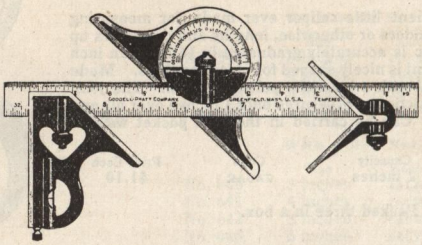
A bevel blade, 45 degrees on one end and 30 degrees on the other, and a narrow blade ⅛ inch wide interchangeable with graduated blade are regular equipment.



	Length Blade	Weight	Code	Price Each
No. 222	2½ inches	1 oz.	YISCO	$3.85

Packed one in a box.

Combination Sets



Tempered Steel Blades

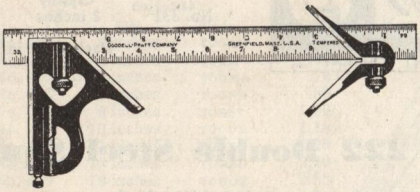
The most useful precision tool ever made for machinists and toolmakers. They are provided with a beam, center head and a No. 180 protractor, shown on page 201. All nicely finished in ebony enamel. All working faces precisely ground. The beam is equipped with small level and scriber.

The accurately graduated, tempered crucible steel blades are graduated in No. 4 graduation.

	Length Blade	Weight	Code	Price Each
No. 390	9 inches	1⅜ lbs.	YOERZ	$6.00
No. 391	12 inches	1½ lbs.	YOEVD	6.60
No. 392	18 inches	1⅝ lbs.	YOEWF	7.50

Packed one in a box.

Combination Squares



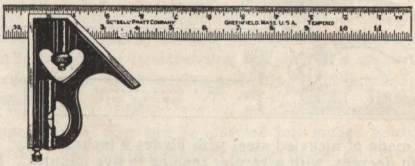
Tempered Steel Blades

These squares are the same as the sets above, but without the protractor. The beam and center head have precisely ground faces and are finished in ebony enamel. Beam equipped with level and a scriber. The tempered crucible steel blades are accurately graduated in No. 4 graduation.

	Length Blade	Weight	Code	Price Each
No. 361	6 inches	⅝ lb.	YIZYH	$2.40
No. 362	9 inches	¾ lb.	YOAGM	3.00
No. 363	12 inches	⅞ lb.	YOAHN	3.60
No. 364	18 inches	1 lb.	YOAJP	4.50

Packed one in a box.

Combination Squares



Tempered Steel Blades

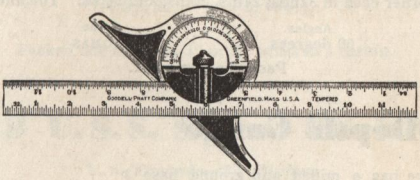
These squares are the same as those on the preceding page but without protractor or center head. The beams have precisely ground faces and are equipped with a small level and scriber. They are nicely finished in ebony enamel.

The tempered crucible steel blades are accurately graduated, clearly etched in No. 4 graduation.

	Length Blade	Weight	Code	Price Each
No. 371	6 inches	½ lb.	YOBJE	$1.80
No. 372	9 inches	⅝ lb.	YOBLO	2.40
No. 373	12 inches	¾ lb.	YOBOL	2.90
No. 374	18 inches	⅞ lb.	YOBUM	3.90

Packed one in a box.

Bevel Protractors



Tempered Steel Blades

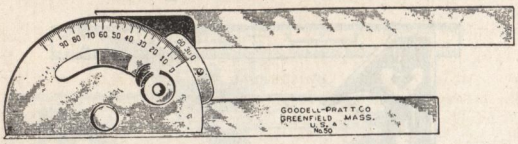
The head of these beautifully made tools is about 7 inches long. The face is precisely ground and polished. The turret carries the blade and a small, accurately set level. It is accurately graduated 90 degrees either side of 0 and every care is taken to have it right angles to the face of the head.

The blade is made of tempered crucible steel accurately graduated in No. 4 graduation.

	Length Blade	Weight	Code	Price Each
No. 180	Protractor head only	⅝ lb.	YEJEG	$3.00
No. 181	9 inches complete	¾ lb.	YEJJO	4.50
No. 182	12 inches complete	⅞ lb.	YEJUK	5.10
No. 183	18 inches complete	1 lb.	YEKGA	6.00

Packed one in a box.

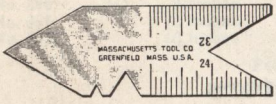
No. 50 Draftsman's Protractor



This protractor is made of nickeled steel with blades 9 inches long. The arc is 4 inches in diameter, graduated in degrees, with a vernier reading to five minutes. It has a binding screw on one side that securely holds the blades at any angle and enables it to be picked up and moved about readily. The blades are fastened into the arc in such a manner as to make all parts come flush on the underside, thus making a perfectly flat surface for resting on the table. Either blade can be used in contact with a T-square, giving any angle and its complement from 0 to 90 degrees. It forms a perfect adjustable triangle. Finely polished.

		Weight	Code	Price Each
No. 50	In carton	½ lb.	YAFIX	$9.20
No. 50	In polished mahogany case	⅞ lb	YAFOZ	10.50

Tempered Center Gauge



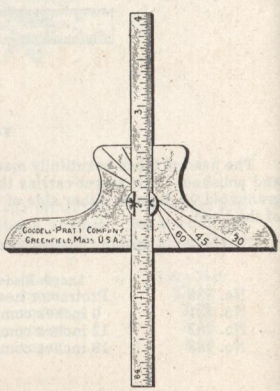
This center gauge is made from the very best quality of spring tempered crucible steel, graduated on our perfected dividing engines. It is accurately ground on all faces, and lapped in the notches to a light tight fit with a standard. It has the highest possible finish and is guaranteed accurate.

Graduated one corner each in 32nds, 24ths, 20ths, and 14ths. Thickness, 1/30 inch.

	Angles	Code	Price Each
No. 438	60 degrees	YOMAS	$0.50

Packed six in a box.

Rule Depth Gauge



This depth gauge has a milled and ground base 3 inches long and a narrow tempered steel rule 6 inches long. At 90 degrees the rule sets in a slot in the body machined with the greatest accuracy at right angles to the base. Graduations and figures are cleanly etched and easily legible. The blade can be turned parallel to the base so as to occupy but little room in the tool chest or in one's pocket. The tool also makes a useful T-square. The head is graduated with lines indicating 30°, 45° and 60° Rule graduated in No. 10 graduation.

	Rule	Code	Price Each
No. 80	6 inches	YAPUL	$2.00

Packed one in a box.

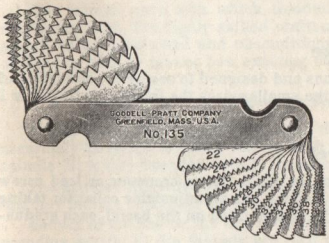
Screw Pitch Gauges

Designed for quickly and positively determining the pitch of screw threads. The teeth milled on the thin blades are the exact profile of a standard screw thread, each leaf being numbered with its own particular pitch. To determine the pitch of a screw try successive leaves of the gauge until the one is found which meshes perfectly with the thread. The pitch can then be read directly from the leaf.

The leaves are shaped so that they can be inserted into tapped holes for gauging internal threads as well as external. The leaves not in use can be folded into the handle.

The gauges on this and the following pages are for V-threads and U. S. Standard threads.

Nos. 135 and 436 Screw Pitch Gauges



No. 135 has 22 pitches for V-threads, as follows: 9, 10, 11, 11½, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 27, 28, 30, 32, 34, 36, 38, and 40. Length of leaves, 1 inch.

No. 436 has 30 pitches for V-threads, as follows: 4, 4½, 5, 5½, 6, 7, 8, 9, 10, 11, 11½, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 27, 28, 30, 32, 34, 36, 38, 40, 42. Length of leaves, 1⅛ inches.

	Leaves	Code	Price Each
No. 135	22	YECUD	$1.00
No. 436	30	YOLVO	1.25

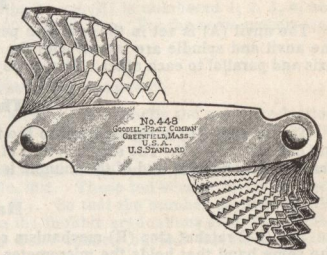
Packed one in a box, 12 or 50 boxes in a carton.

No. 448 U.S.S. Screw Pitch Gauge

U. S. Threads—25 Pitches

This gauge has 25 pitches and a center gauge leaf. The pitches are for United States Standard threads as follows: 2¼, 2⅜, 2½, 2⅝, 2¾, 2⅞, 3, 3¼, 3½, 4, 4½, 5, 5½, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 18, 20. Length of leaves, 1½ inches.

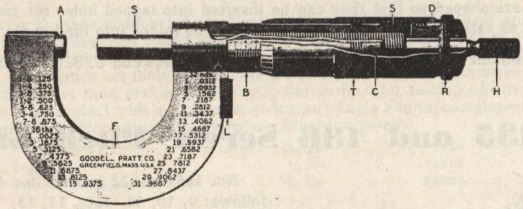
	Leaves	Code	Price Each
No. 448	26	YONTA	$1.35



Packed one in a box, 12 or 50 boxes in a carton.

Micrometer Calipers

The micrometer is the precision tool in most general use where measurements in thousandths or even 1/10000 of an inch are necessary. They are made in many styles and capacities for outside, inside, and depth measurements. While their construction is comparatively simple, the utmost care must be used in every step of their manufacture if extreme accuracy and dependability are to be secured. Adjustments for wear must be provided so that the accuracy of the instrument can be maintained.



The Frame

The frames (F) are steel forgings of good proportions and designed to secure the strength and rigidity that is essential. In the larger and a few of the smaller sizes the frames are forged in I beam form to secure rigidity without undue weight.

The Barrel

The barrel (B) carries the threaded steel bushing in which the micrometer or lead screw runs and is part of the forged frame. The threaded bushing has an adjustable collar for taking up any wear at this point. One inch divided into 40ths is graduated on the barrel, each graduation representing one revolution of the lead screw.

The Spindle and Lead Screw

The spindle and lead screw (S) in all Goodell-Pratt micrometers is made of one solid piece of very fine tool steel. It is accurately machined and then allowed to season for months before the final precision machining and finishing is done. This precaution is taken to avoid shrinkage of the finished screw and spindle. All machine operations are within extreme precision limits on machines specially developed and perfected for the purpose.

The Anvil

The anvil (A) is set in the frame in perfect alignment with the spindle. The faces of both the anvil and spindle are lapped with the utmost care so that they are at right angles to their axis and parallel to each other. Proper adjustment for wear of the anvil is provided.

The Thimble

The thimble (T) is rigidly fixed to the lead screw and spindle and fits down over the barrel but does not touch it. The slightest turn of the thimble results in a similar movement of the lead screw. The beveled end of the thimble is graduated into 25 equal divisions.

Ratchet Stop

The G-P ratchet stop (R) mechanism can be easily operated by the thumb and forefinger of the same hand that holds the micrometer. This leaves one hand entirely free for holding the work to be "miked." This new departure from the old practice of combining the ratchet stop

with the speeder at the end of the thimble has proven very popular because it is both convenient and speeds up work. The tension in the ratchet mechanism is nicely adjusted so that when the knurled ratchet ring is turned it ratchets when just the right amount of pressure is exerted on the spindle to give accurate readings. The ratchet stop insures uniformly accurate reading as it entirely eliminates the personal equation.

The Speeder

A knurled handle (H) of small diameter, provided on many sizes, is fixed to the end of the thimble. By turning this speeder between the thumb and forefinger the spindle can be run in or out very rapidly as required.

Spindle Lock

A spindle lock (L) is provided on many sizes. This lock is controlled by turning a knurled nut located on the frame directly under the barrel. A slight turn of the nut locks the spindle securely, preserving the setting at any desired point. The No. 112R micrometer has the lock nut located directly on the spindle where it runs through the frame.

Accuracy, Workmanship and Finish

The extreme care with which Goodell-Pratt micrometers are made, the special precision machinery used, the highly skilled craftsmen employed, and the pride we take in our product, permit us to recommend and unconditionally guarantee the accuracy, workmanship and finish of this fine line, no matter how exacting the requirements may be.

How to Read a Micrometer

To the frame (F) is immovably fixed the barrel (B). On the inside of this barrel is a very accurately threaded bushing with a pitch of 40 threads per inch. The hidden portion of the spindle (S) is also threaded with 40 threads per inch and runs in the nut formed by the barrel (B).

The extreme right end of the spindle (S) is securely fastened to the thimble (T). These are the only moving parts and they move in unison.

An inch of the line on the barrel (B) parallel to its axis is graduated into 40 equal parts corresponding exactly to the threads per inch on the screw of the spindle (S). When the thimble (T) is given one complete rotation the spindle must move just one graduation, or 1/40 of an inch, which is 25/1000 of an inch. The beveled edge of the thimble (T) is divided into 25 equal graduations; each of these must, therefore, represent 1/25 of 1/40 of an inch, or 1/1000 of an inch. The instrument is so graduated and adjusted that when the face of the spindle (S) just touches the fixed anvil (A) the 0 graduation on the thimble (T) exactly coincides with the 0 graduation on the barrel (B).

To get the measurement between the fixed anvil (A) and the face of the spindle (S), multiply the number of divisions visible on the barrel (B) by 25 and add the number of divisions on the thimble (T) from 0 to the graduation opposite the longitudinal line on the barrel (B).

To facilitate reading, every fourth graduation on the barrel (B) is numbered 1, 2, 3, 4, etc., the figure representing respectively 0, .100", .200", .300", .400", etc. For the same reason every fifth division on the thimble graduation is numbered.

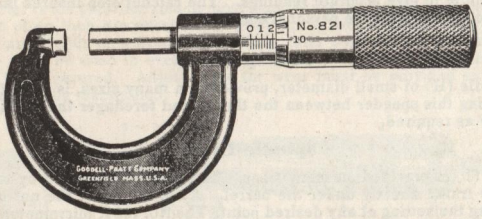
Reading Ten-Thousandths Micrometers

Micrometers that read to one ten-thousandths of an inch have exactly the same graduations as those reading to one-thousandths, with the addition of a vernier reading to 1/10 of the 1/1000 graduations.

There are ten vernier divisions which run the entire length of the barrel (B) and are numbered on the top of the frame, as shown in the cut of the No. 902. These ten vernier divisions correspond exactly to nine of the divisions on the thimble (T). So that the number opposite the line on the vernier that exactly corresponds with a line on the thimble graduations gives the number of ten-thousandths of an inch the micrometer has been opened beyond the last .001 inch graduation.

Micrometer Calipers

Range 0 to 1″ Black Enameled Frames



The same fine workmanship and dependable accuracy characterize these black enamel steel frame micrometers. The shape of the frame at the anvil is so designed that measurements can be made in slots, over shoulders, etc.

Measures by 1/1000 of an inch from 0 to 1 inch. Decimal equivalents are marked on the thimble. Quick, positive adjustment for wear provided.

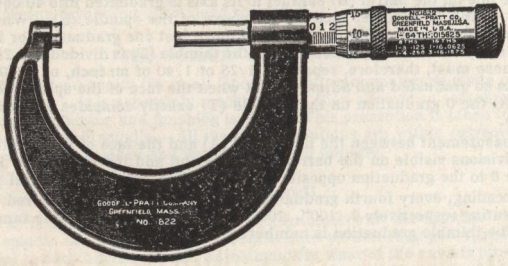
No. 1821 is exactly the same as No. 821 illustrated, except that it is equipped with a thimble with decimal equivalents stamped on it, as shown on No. 1822 below.

	Capacity	Code	Price Each
No. 821	0 to 1 inch	ZEKBO	$5.75
No. 1821	0 to 1 inch	ZOCUM	6.25
Leather case		WYDDA	1.25

Packed one in a box.

Micrometer Calipers

Range 1″ to 2″ Black Enameled Frames



Graduated to read by 1/1000 inch from 1 to 2 inches either lengths or diameters. The frame is forged steel, nicely black enameled. The shape of the frame at the anvil permits measurements in slots, over shoulders, etc., otherwise not possible. Quick, positive adjustment for wear provided.

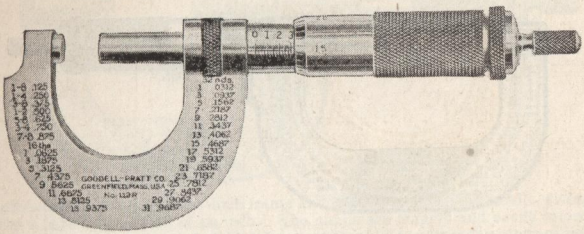
No. 822 is exactly the same as No. 1822 illustrated, but without decimal equivalents, as shown on No. 821.

	Capacity	Code	Price Each
No. 822	1 to 2 inches	ZEKBY	$6.50
No. 1822	1 to 2 inches	ZOCUT	7.00
Leather case		WYUSY	1.60

Packed one in a box.

No. 112R Micrometer

Range 0 to 1″ Cut-away Frame Ratchet Stop



This micrometer embodies more desirable refinements than any micrometer made. The frame is cut away on the anvil side allowing measurements to be taken, impossible with the regular style frame. It is equipped with a ratchet stop located on the thimble.

A clamp ring set in the frame locks the spindle at any desired point. A speeder is provided on the end of the thimble for running the spindle in or out rapidly. Every necessary compensation for wear is provided.

Measures by 1/1000 of an inch from 0 to 1 inch. Decimal equivalents etched on the drop-forged steel frame.

	Capacity	Code	Price Each
No. 112R	0 to 1 inch	YAZTU	$10.00
Leather case		WYDDA	1.25

No. 2R Micrometer Caliper

Range 0 to 1″ Ratchet Stop

This micrometer is the same as No. 112R, except that the frame is not cut away and the spindle lock nut is located on the frame under the barrel. A speeder is provided at the end of the spindle. Every necessary compensation for wear is provided.

Measures by 1/1000 of an inch from 0 to 1 inch. Decimal equivalents etched on the frame.

	Capacity	Code	Price Each
No. 2R	0 to 1 inch	WYCOG	$10.00
Leather case		WYDDA	1.25

No. 902R Micrometer Caliper

Range 0 to 1″ by One Ten-Thousandths of an Inch

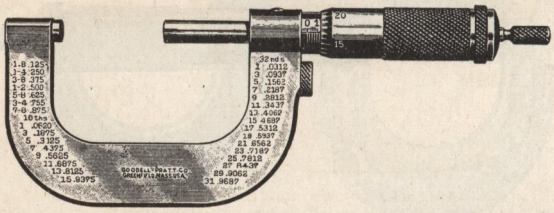
Same as No. 2R above, but reading by 1/10000 from 0 to 1 inch. The ratchet stop insures uniform and accurate readings. Frame etched with decimal equivalents. Equipped with spindle lock nut and speeder at end of the thimble.

Measures by 1/10000 from 0 to 1 inch.

	Capacity	Code	Price Each
No. 902R	0 to 1 inch	ZIABX	$11.75
Leather case		WYDDA	1.25

No. 20R Micrometer Caliper

Range 1″ to 2″ Ratchet Stop

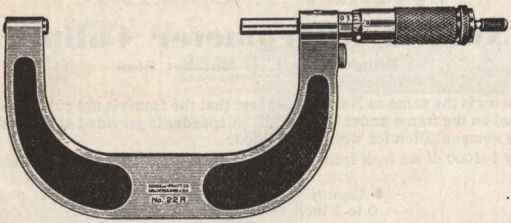


This micrometer is graduated to read by 1/1000 inch from 1 to 2 inches, either lengths or diameters. Decimal equivalents are etched on the frame, which is drop-forged from a solid steel bar. A locking device is provided to hold the spindle in any desired position. Every necessary compensation for wear is provided. Same smooth ratchet mechanism and speeder as on other sizes.

	Capacity	Code	Price Each
No. 20R	1 to 2 inches	WYUHM	$11.00
Leather case		WYUSY	1.60

Micrometer Calipers

Ranges up to 6″ by Thousandths of an Inch



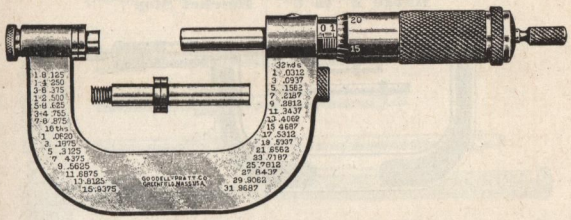
The steel frames of these micrometers are forged in the form of an I beam to give it ample strength and rigidity without too much weight. The web portion of the frame is black enameled and the edges nicely polished. They are graduated to read by 1/1000 of an inch either lengths or diameters. Provided with both lock nut and speeder. The same smooth ratchet mechanism is used on these larger sizes.

	Capacity	Code	Price Each
No. 21R	2 to 3 inches	WYOWO	$10.50
Leather case for 21R		WYNRO	3.00
No. 22R	3 to 4 inches	WYUWO	11.35
Leather case for 22R		WYVUB	3.50
No. 23R	4 to 5 inches	WYVZO	12.40
Leather case for 23R		WYPIR	4.60
No. 24R	5 to 6 inches	WYWYE	13.50
Leather case for 24R		WYPIR	4.60

Packed one in a box.

No. 882R Micrometer Caliper

Range 0 to 2″ Ratchet Stop



This micrometer is built on a two-inch frame and is provided with two anvils, giving a capacity of from 0 to 2 inches by 1/1000 of an inch. The anvils are quickly and easily interchangeable.

As a large proportion of the work ordinarily encountered lies within the range of this micrometer, it makes a particularly useful instrument. Its price offers a very considerable saving over the cost of a one-inch and a two-inch micrometer to take its place.

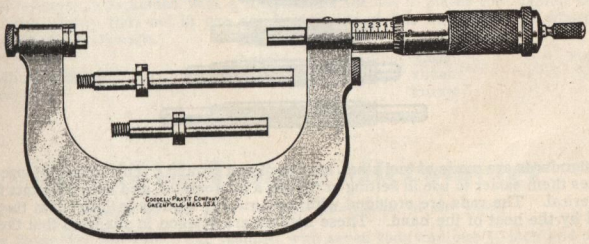
The frame is a beautifully finished forging with decimal equivalents clearly etched on it.

The same fine ratchet stop is provided. This has a smooth, even tension and is located down on the thimble where it can be easily operated by the thumb and forefinger of the same hand that holds the frame, leaving the other hand entirely free to hold the piece to be calipered. A speeder and lock nut are also provided.

	Capacity	Code	Price Each
No. 882R	0 to 2 inches	ZETAL	$14.00
Leather case		WYUSY	1.60

No. 14R Micrometer Caliper

Range 0 to 3″ Ratchet Stop



This micrometer is provided with three interchangeable anvils enabling it to make the entire range of measurements from 0 to 3 inches by 1/1000 of an inch. Each anvil is hardened and carefully fitted. They have a special means of adjustment. Anvils are quickly and easily interchanged. Every necessary adjustment for wear is provided and also a lock nut.

Equipped with ratchet stop and speeder.

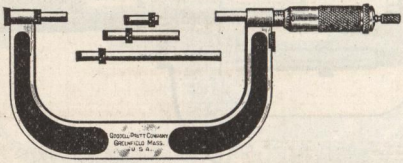
	Capacity	Code	Price Each
No. 14R	0 to 3 inches	WYNOR	$19.70
Leather case		WYNRO	3.00

Packed one in a box.

GREENFIELD, MASSACHUSETTS.

No. 622R Micrometer Caliper

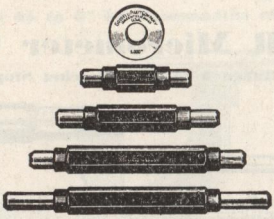
Range 2" to 6" Ratchet Stop



Designed primarily for use of automotive service and repair shops where a specialty is made of cylinder regrinding or honing and piston replacements. It is graduated to read by 1/1000 inch from 2 to 6 inches, covering the entire range of automobile and tractor engine pistons. The four anvils are easily interchangeable and are provided with special adjustments. Equipped with spindle lock and speeder. Every necessary adjustment for wear provided. Ratchet stop on spindle.

	Capacity	Code	Price Each
No. 622R	2 to 6 inches	YUZPM	$20.50
Leather case		WYPIR	4.60

No. 563 Micrometer Standards



These standards are made of tool steel, hardened and ground. The ends are lapped parallel, which makes them easier to use in setting or testing a micrometer, and more accurate than when lapped spherical. The rods are provided with hard rubber holders in order that they may not be affected by the heat of the hand. These holders are octagon in shape so that they will not roll.

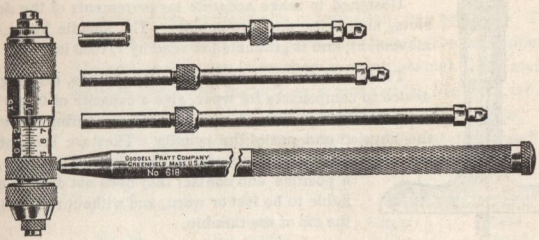
One-inch standards are round discs, all other sizes are $\frac{5}{16}$-inch rods with rubber holders.

	Capacity	Code	Price Each
No. 563	1-inch disc	YUJUZ	$1.50
No. 563	2-inch rod	YUJVE	2.00
No. 563	3-inch rod	YUJYO	2.25
No. 563	4-inch rod	YUKAV	2.50
No. 563	5-inch rod	YUKCY	2.75
No. 563	6-inch rod	YUKEP	3.00

Packed one in a box.

No. 618 Inside Micrometer

Range 2″ to 6″ by Thousandths of an Inch



The many exclusive features found in this inside micrometer will commend it to anyone. It makes all inside measurements by 1/1000 inch from 2 to 6 inches.

The lead screw is precisely cut and has a ½-inch run. Four easily interchangeable measuring rods are furnished and also a hardened steel collar ½ inch in length which can be slipped over the shank of any rod. For measurements from the even inch to the next ½ inch the collar is not used, but for measurements from ½ inch to the next inch the collar is slipped over the shank of the rod in use, which raises the rod shoulder ½ inch away from the chuck face.

Two sets of graduations permit direct readings with or without the collar.

Shoulder on each rod comes to a positive seat against the end of the chuck. This does away with the possibility of dirt collecting inside of the chuck and preventing the rods from seating properly. Wear of the rods compensated for by loosening the binding nut and adjusting the hardened steel anvil in the end of each rod.

Each micrometer is furnished with a long handle for use in places that cannot be reached with the hand. Extra rods not in use are kept inside of this hollow handle where they are protected from dirt or damage.

	Capacity	Code	Price Each
No. 618 with Handle	2 to 6 inches	YUZAL	$10.00
Leather case		YUZEM	1.65

Packed one in a box.

No. 1218 Inside Micrometer

Range 2″ to 12½″ by Thousandths of an Inch

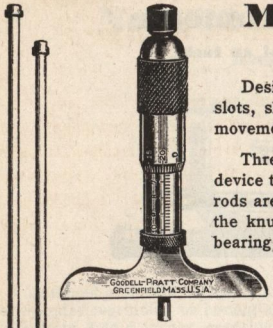
Similar to the No. 618 above, but supplied with seven rods and one ½-inch and one 1-inch collar, giving a range of from 2 to 12½ inches by 1/1000 of an inch.

The lead screw has a ½-inch run and the barrel has two sets of graduations, permitting direct readings with or without the collars.

Each micrometer furnished with a long solid handle for use in places inaccessible to the hand.

	Capacity	Code	Price Each
No. 1218 with Handle	2 to 12½ inches	ZISTA	$8.25
Leather case		ZISTO	2.75

Packed one in a box.



Micrometer Depth Gauges

Range 0 to 3″ by Thousandths of an Inch

Designed to make accurate measurements of the depth of holes, slots, shoulders, and projections. The spindle has a full one-inch movement, and is graduated to read by 1/1000 inch.

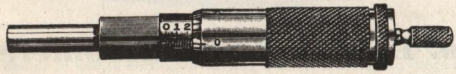
Three measuring rods with hardened ends, carrying an adjusting device to compensate for wear, give a capacity of 0 to 3 inches. The rods are inserted through a hole in the measuring screw by removing the knurled end nut of the spindle. They are brought to a positive bearing against a finished seat on the end of the screw. This gives a positive end contact that does not depend on any device liable to be lost or worn, and without rods projecting above the top of the thimble.

The base is $^{11}/_{32}$ inch wide, hardened, ground and accurately hand-lapped at right angles to the rods.

	Base	Capacity	Code	Price Each
No. 31	2 inches	0 to 3 inches	YAALÇ	$9.00
No. 32	4 inches	0 to 3 inches	YAAWN	11.50
Leather case for No. 31			YAASK	1.65
Leather case for No. 32			YABIT	2.00
Extra Set of 3 Rods for measurements 3 to 6 inches				2.90
Extra Set of 6 Rods for measurements 6 to 12 inches				8.35

No. 38R Micrometer Head

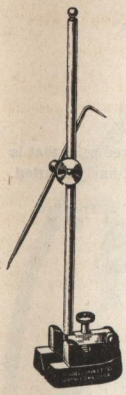
Range 0 to 1″ by Thousandths of an Inch



For use on special gauges, fixtures and machines where close measurements are required. They afford an easy means of securing precision measurements and adjustments. The spindle and lead screw, barrel and thimble are the same carefully made and tested parts as used in our regular micrometers. Graduated to read by 1/1000 inch from 0 to 1 inch. Equipped with ratchet stop.

	Capacity	Code	Price Each
No. 38R	0 to 1 inch	YADAB	$5.50

Packed one in a box.



No. 56 Surface Gauge

This gauge is simple in construction, but accurate. The face of the base and the angles formed by the two lugs in front are milled and finished. The rest of the base is finished in black enamel. The standard is highly polished steel, and the scriber is made of the best drill rod. It has a fine adjustment by means of the knurled nut and base screw. It can be used as a depth gauge and, in many cases, makes a useful scratch gauge. Spindle is 8 inches long.

	Height	Weight	Code	Price Each
No. 56	10½ inches	1 lb.	YAGYE	$2.75

Packed one in a box.

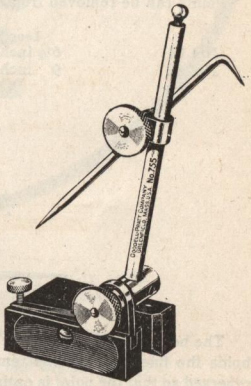
Nos. 755 and 889 Surface Gauges

These surface gauges, although very moderately priced, are very well made and finished, and embody many very desirable features.

They are offered in two lengths of spindle and are equipped with a 5-inch scriber and a hardened steel base measuring 2¼ x 1½ x ¾ inch.

The base is carefully ground for work on a surface plate and also grooved for use on cylindrical surfaces. Corrugated finger grips are milled in the sides. The base front is slotted so that the spindle can be turned down and the tool used as a depth gauge. Also by loosening the thumb screw of the binder head the spindle can be dropped down through the slot and the marker on its end used as a scratch gauge.

The scriber head has a spring control which holds both scriber and head at any desired point while the thumb nut is being tightened. This feature, with the fine adjustment provided in the base, allows very quick, accurate settings.



	Height	Weight	Code	Price Each
No. 755	5⅞ inches	11 ozs.	ZAYLE	$3.20
No. 889	9⅞ inches	12 ozs.	ZEYGD	3.50

Packed one in a box.

No. 58 Single Point Scriber

This scriber is made of a fine grade of round steel with a beautifully tapered point that is carefully tempered, ground and polished. The body is 5/32 inch in diameter and finely knurled.

	Length	Code	Price Each
No. 58	4½ inches	YAHOC	$0.25

Packed three in a box.

Double Point Scribers

The two points with which these scribers are equipped are made of a fine grade of steel. They are swaged to a long, even taper, carefully tempered, ground and polished. The body is made of ¼-inch round steel, finely knurled, making a comfortable handle with a sure grip.

Points can be removed from the body and replaced when desired.

	Length	Weight Box	Code	Price Each
No. 61	6½ inches	5 ozs.	YAIGZ	$0.40
No. 62	9 inches	6 ozs.	YAIJA	.45

Packed six in a box.

No. 75 Scriber

The body of this tool is made of fine knurled hollow steel tubing and fitted with a chuck which holds the finely drawn and tempered scriber point. The point can be entirely removed and reversed so that the point is entirely protected and the tool can be carried in the pocket if desired. Overall length, 4⅞ inches.

	Length of Blade	Weight	Code	Price Each
No. 75	2⅜ inches	½ oz.	YAJRA	$0.35

Packed six in a box.

MOHAWK SHELBURNE LINE

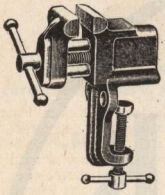
A selected assortment of tools that enjoy a very ready sale, popularly priced, to meet the demand for this class of tool that has arisen under the conditions that have existed for the past few years.

While not of the fine, high quality and superior finish of the regular Millers Falls and Goodell-Pratt lines, each tool in the Mohawk-Shelburne line represents a good value and will give a big return in satisfactory service for the purchase price.

The two new carded items in this line merit unusual attention. One is the biggest value ever offered in a ten-cent glass cutter and the other a very fast-moving awl and screw-driver combination to sell at twenty-five cents.

The Mohawk-Shelburne Line

No. 15 M-S Vise

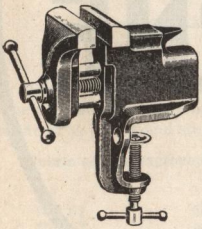


A small vise of the well known twin guide rod construction which, with the clean cut screw, gives smooth action and rigidity. Jaws meet squarely. Clamps to bench up to 2 inches thick. Machined jaws 1½ inches wide. Body casting finished in red and movable jaw casting in black enamel.

	Jaws	Weight	Price Each
No. 15	1½ inches	2⅛ lbs.	$0.75

Packed one in a box.

No. 1700 M-S Vise

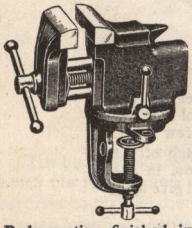


A strong, rigid vise with machined jaws 2½ inches wide that open 2¼ inches. Jaws meet squarely. Twin steel guide rod construction. Small anvil on body casting. Body finished in red, movable jaw in black enamel. Clamps to bench up to 2 inches thick.

	Jaws	Weight	Price Each
No. 1700	2½ inches	3½ lbs.	$1.20

Packed one in a box.

No. 18 M-S Swivel Vise

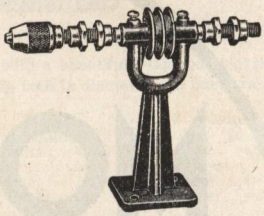


Equipped with swivel base so vise can be swung to any desired angle, and locked by means of the lever at right. Twin steel guide rod construction. Machined jaws 2½ inches wide opening 2¼ inches. Jaws meet squarely. Clamps to bench up to 2 inches thick. Body casting finished in red; movable jaw in black enamel.

	Jaws	Weight	Price Each
No. 18	2½ inches	4¼ lbs.	$1.40

Packed one in a box.

No. 501 M-S Polishing Head

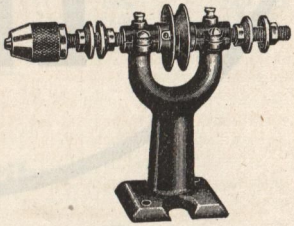


A big value in a small machine. The ½-inch spindle is equipped with two sets of flanges for holding wheels up to ¾ inch wide with ½-inch holes, also a three-jawed chuck for holding round shanks up to ¼ inch in diameter. Pulley with two grooves for V belt is 1¾ inches in diameter. Oil holes with brass plugs provided. Base black and pulley red enameled.

	Height Overall	Weight	Price Each
No. 501	6¾ inches	2¼ lbs.	$1.40

Packed one in a box.

No. 702 M-S Grinding Head



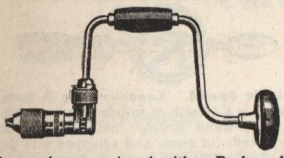
A heavier machine, fitted with ½-inch spindle equipped with spring cover oil cups and adjustable bearings. Two sets of flanges are provided holding wheels up to ⅞ inch thick with ½-inch holes, also a three-jawed chuck to hold round shanks up to ⅜ inch diameter. Steel collars nickel plated. Pulley for V belt is 2¼ inches in diameter and is enameled red. Base black enameled. Can be driven from above, behind or below.

	Height Overall	Weight	Price Each
No. 702	7⅛ inches	4¼ lbs.	$3.00

Packed one in a corrugated box.

The Mohawk-Shelburne Line

No. 1710 M-S Brace

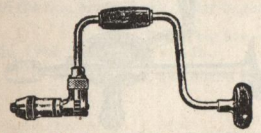


A new brace equipped with a Barber chuck with alligator jaws and semi-boxed steel ratchet. Knurled shifter ring controls ratchet mechanism. Steel clad, ball bearing head made of hardwood, nicely finished in mahogany lacquer. Hardwood sweep handle finished in same manner. All exposed metal parts nicely polished, nickeled and buffed.

	Sweep	Weight	Price per Doz.
No. 1710	10 inches	2½ lbs.	$25.25

Packed one-half dozen in a box.

Nos. 1410-1610 M-S Brace



A serviceable brace representing a big value. Equipped with Barber chuck with malleable alligator jaws and a sturdy semi-boxed ratchet. Knurled shifter ring finished in red enamel. Handles mahogany stained hardwood. Stained hardwood head screwed on and locked with two wood screws.

	Sweep	Weight	Price per Doz.
No. 1410 Polished	10 inches	2¼ lbs.	$12.65
No. 1610 Nickeled	10 inches	2¼ lbs.	15.15

Packed one-half dozen in a box.

No. 412 M-S Auger Bits

Solid center pattern well forged and finished, with sharp lips, spurs and screws. Nicely finished with square shanks red enameled. Average weight per dozen, 1¾ lbs.

No.	Size	Price per Doz.	No.	Size	Price per Doz.
412	4/16 inch	$4.00	412	11/16 inch	$7.00
412	5/16 inch	4.00	412	12/16 inch	7.00
412	6/16 inch	4.00	412	13/16 inch	8.00
412	7/16 inch	4.50	412	14/16 inch	8.00
412	8/16 inch	5.00	412	15/16 inch	9.00
412	9/16 inch	5.50	412	16/16 inch	9.00
412	10/16 inch	6.00			

Packed one dozen of a size in a box.

No. 700 M-S Block Plane

Bottom a fine gray iron casting. Bottom and sides milled and polished. Inside black enameled. Plane iron of good quality steel, carefully hardened and tempered. Knob handle hardwood with black lacquer finish. Top half of clamp lever handle red enameled. Nickel-plated clamp screw.

	Length	Cutter	Weight	Price Each
No. 700	7 inches	1⅝ inches	1⅜ lbs.	$0.60

Packed one in a box.

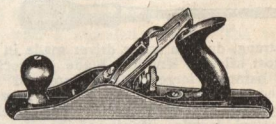
No. 900 M-S Smooth Plane

Bottom and frog fine gray iron castings. Bottom and sides milled and polished. Inside black enameled. Plane iron of good quality steel, carefully hardened and tempered. Lever side adjustment of cutter. Screw end adjustment of cutter. Clamp lever handle red. Hardwood handle and knob with black lacquer finish.

	Length	Cutter	Weight	Price Each
No. 900	9 inches	2 inches	3⅝ lbs.	$1.80

Packed one in a box.

No. 814 M-S Jack Plane



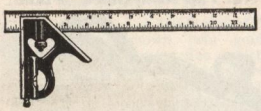
Bottom and frog of fine gray iron castings. Bottom and sides milled and polished. Inside black enameled. Plane iron of good quality steel, carefully hardened and tempered. Lever side adjustment and screw depth adjustment of cutter. Hardwood handle and knob with black lacquer finish. Clamp lever handle finished in red.

	Length	Cutter	Weight	Price Each
No. 814	14 inches	2 inches	4¼ lbs.	$2.20

Packed one in a box.

The Mohawk-Shelburne Line

M-S Combination Squares



This combination square is fitted with a steel blade, 1 inch wide. The figures are large and clear and the graduation lines deeply etched, not stamped. Graduated on one side in 8ths and 16ths, and 16ths and 32nds on the other. The beam is 4 inches long, black enameled, except for the bearing surfaces which are carefully machined. The beam is equipped with a cat's eye level and a scriber. Knurled clamp nut finished in red enamel.

	Length Blade	Weight	Price Each
No. 9500	9 inches	13 ozs.	$0.95
No. 1200	12 inches	15 ozs.	1.00

Packed one in a box.

No. 400 M-S Screw Driver

A substantial, serviceable tool that can be sold at a decidedly popular price. Blade, 4 inches long, forged from tough steel nickel plated and burnished. Bit well finished. Nickel plated ferrule. Hardwood handle with mahogany finish.

	Weight per Doz.	Price per Doz.
No. 400	2 lbs.	$1.45

Packed one dozen in a box.

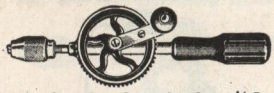
No. 7777 M-S Screw Drivers

A strong, durable screw driver made in the four most saleable lengths. Blade of specially tough, hammer-forged steel, hardened and tempered its entire length. Forged lugs on shank prevent turning in handle. Heavy nickel-plated steel ferrule. Hardwood handle with black lacquer finish with red end. Blades nickel plated and burnished.

	Length Blade	Price per Doz.
No. 7777	3 inches	$1.70
No. 7777	4 inches	1.95
No. 7777	5 inches	2.10
No. 7777	6 inches	2.25
No. 7777	8 inches	2.75

Packed one dozen of a size in a box.

M-S Hand Drills



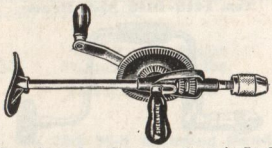
Single Speed Capacity 0 to ¼ Inch

There is a wealth of satisfactory service built into these hand drills. Solid steel frames, single speed, cut gears and equipped with three-jawed chucks that hold 0 to ¼ inch round shanks. Large gear, red enameled. Handles mahogany finished hardwood. End handle equipped with nickel-plated ferrule. Length, 10⅝ inches. Weight, 1 pound.

	Price Each
No. 2500 Solid Handle	$0.75
No. 3200 Hollow Screw Cap and Side Handle	.95

Packed one in a box.

No. 7740 M-S Breast Drill



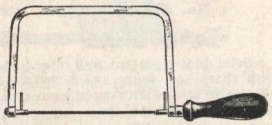
Two Speed Capacity 0 to ½ Inch

A sturdy, dependable, two-speed drill with a three-jawed steel chuck holding 0 to ½ inch round shanks. Machine cut gears; two steel pinions; quick, positive gear shift; frame black enameled; large gear red; handles mahogany finished hardwood.

	Length	Weight	Price Each
No. 7740	16½ inches	4⅜ lbs.	$2.50

Packed one in a box.

No. 1400 M-S Coping Saw

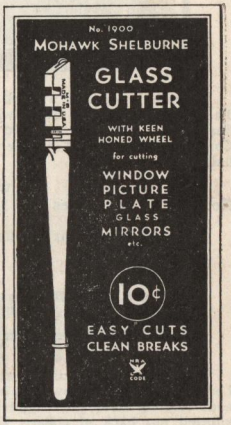


A rigid, durable frame of stiff, flat spring steel. The blade is controlled by pins in the studs at either end, making it unnecessary to remove blade when changing direction of cut. Blades strained by turning the mahogany finished hardwood handle. Frame nickel plated and burnished.

	Throat	Weight	Price Each
No. 1400	4¾ inches	6 ozs.	$0.40

Packed six in a box.

Mohawk-Shelburne Line
Carded Tools



No. 1900 Glass Cutter

Without doubt the finest glass cutter ever offered to sell for ten cents. The frame is die cast from an alloy of ample strength for every requirement. The three breaker notches are clean cut and unusually effective. The frame and handle are clean and nicely shaped. The head has a silvered finish, while the handle is finished in glossy bright red lacquer.

The wheel is made of fine quality steel, carefully heat-treated and honed. Its performance is unusual in a cutter at this price.

Each cutter mounted on a two-tone green display card that sets off the fine finish of the cutter to good advantage.

	Weight per Box	Price per Card
No. 1900	1 lb.	$0.10

Packed one dozen in a box.

No. 110 Awl and Screw Driver

A combination of two handy household tools selling at a popular price. The awl has a 2½-inch blade set in a hardwood handle finished in red and black lacquer with a nickeled ferrule. The screw driver is equipped with the same handle. The blade is well shaped, with nickel finish. The shank is flanged to prevent turning in the handle.

Mounted on an aluminum card, these two tools show up beautifully and sell very freely from bins.

	Weight per Box	Price per Card
No. 110	1¾ lbs.	$0.25

The Mohawk-Shelburne Line

No. 500 M-S Wood Scraper

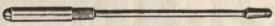
Discontinued—Substitute No. 41 See New Tool Supplement

A fine little tool that will sell in large volume. The double blade, 1½ inches wide, is made of a fine grade of steel that will hold a scraping edge. Comfortable hardwood handle with mahogany finish.

	Width Blade	Weight	Price Each
No. 500	1½ inches	3 ozs.	$0.25

Packed six in a box.

No. 8 M-S Bit Extension

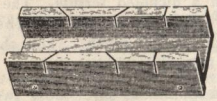


Made of good quality steel throughout. Length, 18 inches. Follows $^{11}/_{16}$ inch bit. Specially heat-treated steel jaws tightened by turning knurled nut back of collar. Forged bit brace shank. All exposed steel parts except shank and jaws polished. Knurled nut finished in red enamel.

	Length	Weight	Price Each
No. 8	18 inches	7 ozs.	$1.50

Packed one in a box

No. 12 M-S Mitre Box



A small inexpensive box for the amateur. Cuts mitres right or left and right angles, using either a panel or back saw. Made of hardwood with front lip to lock over edge of bench.

	Width Cut	Length Overall	Weight	Price Each
No. 12	3 inches	12 inches	1⅞ lbs.	$0.50

Packed six in a carton.

No. 10 M-S Awl

Fitted with a 2⅝-inch carefully tapered, pointed and polished steel blade set in a hardwood handle attractively finished in red and black lacquer. Ferrule nickel plated.

	Blade	Weight per Doz.	Price per Doz.
No. 10	2⅝ inches	14 ozs.	$1.20

Packed one dozen in a box.

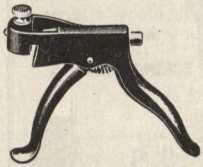
M-S Nail Sets

The head of this set is square while the body is round and knurled to give a good grip. The points are carefully machined and well cupped. Hardened and tempered points and heads for hard service. Blued finish. Made in four sizes: $^{1}/_{32}$ inch, $^{2}/_{32}$ inch, $^{3}/_{32}$ inch and $^{4}/_{32}$ inch.

	Size	Weight per Doz.	Price per Doz.
No. 711	$^{1}/_{32}$ inch	1 lb.	$1.00
No. 712	$^{2}/_{32}$ inch	1 lb.	1.00
No. 713	$^{3}/_{32}$ inch	1 lb.	1.00
No. 714	$^{4}/_{32}$ inch	1 lb.	1.00
No. 1712	Assorted	1 lb.	1.00

Packed one dozen in a box.

No. 1800 M-S Saw Set



The frame of this tool is of the pistol-grip type, nicely finished in red and black enamel. The set and anvil are hardened and tempered steel. Anvil adjustable. Saw teeth always in full view.

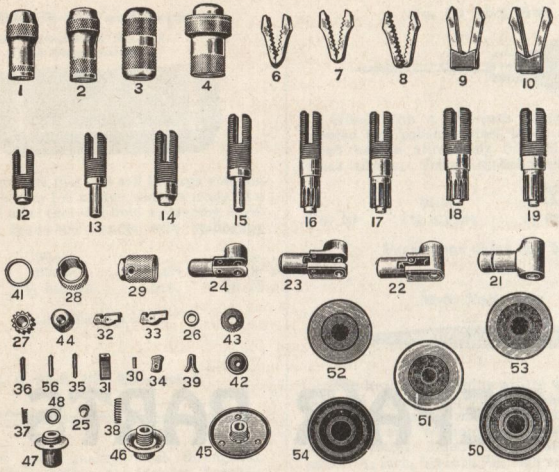
	Length	Weight	Price Each
No. 1800	5⅞ inches	⅝ lb.	$1.00

Packed one in a box.

REPAIR PARTS

GREENFIELD, MASSACHUSETTS

Parts for Braces



When ordering parts, the number of the brace for which they are wanted should be specified, as well as the number of the part. If this information is not available make a sketch of the part showing dimensions.

No.		Each
1	Shell for Nos. 141-143, 161-163	$0.40
1	Shell for Nos. 261-263	.35
1	Shell for Nos. 1661-1663	.45
2	Shell for Nos. 631-633	.40
2	Shell for Nos. 30-34, 30A-34A, 131-133, 12-14, 7006-7014	.60
2	Shell for Nos. 321-323, 1321-1324, 421-423, 221-223	.55
3	Shell for Nos. 730-734, 8130-8133	.60
4	Shell for Nos. 870-872, 769-733, 7312, 2510-2512	2.00
		Pair
6	Jaws for Nos. 141-143, 161-163, 631-633, 261-263	.10
6	Jaws for Nos. 1661-1663	.20
7	Jaws for Nos. 421-423	.30
8	Jaws for Nos. 30-34, 30A-34A, 131-133, 321-323, 1321-1324, 12-14, 221-223, 7006-7014	.60
9	Jaws for Nos. 730-734, 8130-8133, 2510-2512	.60
10	Jaws for Nos. 870-872, 769-773, 7312	.65
		Each
12	Chuck socket for Nos. 141-143	.15
13	Ratchet chuck socket for Nos. 161-163, 1661-1663, 261-263	.25
14	Chuck socket for Nos. 12-14, 221-223	.35
15	Ratchet chuck socket for Nos. 321-323, 1321-1324, 421-423, 631-633	.30

Parts for Braces

No.		Each
16	Ratchet chuck socket for Nos. 30-34, 30A-34A, 7006-7014	$0.50
17	Ratchet chuck socket for Nos. 130-133	.50
18	Ratchet chuck socket for Nos. 769-773, 730-734, 7312	.55
18½	Ratchet chuck socket for Nos. 2510-2512	.80
19	Ratchet chuck socket for Nos. 8130-8133, 870-872	.80
21	Crooked socket for Nos. 131-133, 870-872, 8130-8133	.90
22	Crooked socket for Nos. 769-773, 730-734, 30-34, 30A-34A, 7312, 7006-7014	.70
23	Crooked socket for Nos. 321-323, 1321-1324, 421-423, 161-163, 1661-1663, 631-633	.75
24	Crooked socket for Nos. 261-263	.35
24½	Crooked socket for Nos. 2510-2512	1.00
25	Ratchet chuck socket screw for Nos. 870-872, 769-773, 730-734, 8130-8133, 30-34, 30A-34A, 130-133, 7312, 7006-7014	.10
26	Ratchet chuck socket washer for braces as under No. 25	.10
27	Ratchet gear for braces as under No. 23 and No. 24	.10
28	Boxed ratchet rings for Nos. 769-773, 730-734, 30-34, 30A-34A, 321-323, 1321-1324, 421-423, 161-163, 1661-1663, 631-633, 7312, 7006-7014	.20
29	Enclosed ratchet rings (complete with cam) for Nos. 870-872, 130-133, 8130-8133	.25
30	Enclosed ratchet ring screw for braces as under No. 29	.10
31	Enclosed ratchet pawls and pins (set of two) for Nos. 870-872, 8130-8133, 130-133	.25
32	Boxed ratchet pawls and pins (set of two) for Nos. 769-773, 730-734, 30-34, 30A-34A, 7312, 7006-7014	.25
33	Ratchet pawls (pair) for Nos. 321-323, 1321-1324, 421-423, 1661-1663, 161-163, 631-633	.25
34	Ratchet pawls (set of two) for Nos. 261-263	.15
34½	Ratchet pawls (set of two) for Nos. 2510-2512	.15
35	Ratchet pawl pins for all Nos. except 261-263	.10
36	Ratchet pawl pins for Nos. 261-263	.10
37	Enclosed ratchet pawl springs (set of one) for Nos. 870-872, 130-133, 8130-8133	.10
38	Ratchet pawl spring (set of one) for Nos. 769-773, 730-734, 30-34, 30A-34A, 321-323, 1321-1324, 421-423, 161-163, 1661-1663, 631-633, 7312, 7006-7014	.10
39	Ratchet pawl spring (set of one) for Nos. 261-263	.10
41	Socket ring washer for braces Nos. 870-872, 769-773, 730-734, 8130-8133, 30-34, 30A-34A, 130-133, 7312, 7006-7014	.10
42	Ball race for Nos. 870-872, 769-773, 730-734, 8130-8133, 130-133, 30-34, 30A-34A, 12-14, 321-323, 7006-7014, 2510-2512	.10
43	Ball bearing washer for Nos. 870-872, 769-773, 730-734, 8130-8133, 30-34, 30A-34A, 130-133, 12-14, 221-223, 321-323, 1321-1324, 7006-7014, 2510-2512	.10
44	Anti-friction collar for Nos. 1321-1324, 221-223	.10
45	Quill for Nos. 870-872, 769-773, 30A-34A, 1321-1324, 2510-2512, 7006-7014	.35
46	Quill for Nos. 730-734, 8130-8133, 30-34, 130-133, 321-323, 12-14, 221-223	.35
47	Quill for Nos. 421-423, 161-163, 1661-1663, 631-633, 261-263, 141-143	.20
48	Quill washer for Nos. under 46 and No. 7312	.10
49	Quill washer for Nos. under 47 (not illustrated)	.10
50	Head for braces Nos. 870-872, 769-773, 30A-34A, 2510-2512	.55
51	Head for braces Nos. 730-734, 30-34, 8130-8133, 130-133, 12-14	.55
52	Head for braces Nos. 321-323, 221-223, 7006-7014	.25
53	Head for braces Nos. 421-423, 161-163, 1661-1663, 631-633, 261-263, 141-143	.20
54	Head for braces Nos. 1321-1324	.25
56	Ratchet gear pin for braces as under Nos. 23 and 24	.10

Parts for Millers Falls and Goodell-Pratt Breast Drills

Number	Chuck Complete	Jaws and Springs Per Set	Chuck Shell	Chuck Socket	Frame	Large Gear	Small Gear	Crank and Handle	Stationary Side Handle	Breast Plate	Aux. Breast Plate	Spindle	Frame Stem	Ball Bearing	Level	Gear Screw	Crank Screw	Clutch	Clutch Shield	Lock Block Complete
6A	$1.00	.60	...	...	1.50	1.00	.25	.50	.25	.30	...	.30	...	.25	...	...	...	.20	.15	...
7	1.80	.80	...	...	1.50	1.00	.25	.50	.25	.30	...	.30	...	.25	...	...	...	.20	.15	...
10	2.60	.80	.70	1.40	1.10	1.00	.50	1.35	.35	.40	...	...	...	.25	.35	.15	.15	...	...	...
12	1.70	.80	.70	.40	1.40	1.00	.40	.50	.20	.35	...	...	...	.25	.35	.15	.15	...	...	...
12A	1.65	.60	.65	.55	1.40	1.00	.40	.50	.20	.35	...	...	...	.25	.35	.15	.15	...	...	...
13	2.00	.80	.70	.40	.90	1.00	.30	1.25	.20	.35	...	...	...	.25	.35	.15	.15	...	...	...
15	1.90	.80	.70	.60	1.30	1.10	.40	.60	.35	.35	...	...	...	.25	.35	.15	.15	...	...	...
19	1.40	.60	.55	.70	.90	1.00	.40	.45	.35	.35	...	...	.30	.25	...	.15	.15	...	...	...
19A	...	.60	.60	.40	.90	.90	.30	.35	.20	.30	...	...	.20	.25	...	...	.10	...	...	.25
29A	1.25	.80	...	...	.90	.90	.30	.35	.20	.30	...	.35	.20	.25	...	...	.10	...	...	.25
87	2.00	.80	.70	.50	1.30	1.10	.70	3.90	.20	.35	.50	...	...	.25	...	.15	.10	...	...	...
97	2.50	.90	.80	.30	1.30	1.10	.70	3.90	.20	.35	.50	1.20	...	.25	...	.15	.10	...	...	...
99	1.90	.75	.70	.40	1.30	.90	.25	.40	.20	.30	.60	...	...	.25	...	.15	.10	...	...	...
100	2.50	.70	.80	.30	1.30	1.00	.25	.40	.20	.30	.50	.50	...	.25	...	.15	.10	...	...	...
112	1.50	.60	.50	.60	.80	.45	.25	.40	.20	.35	...	...	...	.25	.30	.15	.10	...	...	...
118	2.50	.70	.80	.30	1.40	1.10	.40	.45	.20	.35	...	.45	...	.25	.35	.15	.10	...	...	...
120	1.75	.60	.60	.30	.90	.90	.30	.40	.20	.35	...	.40	.30	...	...	...	.10	...	...	...
120A	1.25	...	...	...	.90	.85	.30	...	.20	.30	...	...	.20	.25	...	...	...	...	...	.25
200	2.50	.70	.80	.30	1.30	1.05	.25	1.80	.20	.35	.50	.45	...	.25	...	.15	.10	...	...	...
212	1.80	.70	.30	.30	.80	.45	.25	.40	.20	.35	...	.15	...	.25	.30	.15	.10	...	...	...
219	...	.80	.30	...	.85	1.00	.25	.30	.25	.30	...	.45	.25	.25	...	...	...	...	...	.25
477	.80	.50	...	...	.85	1.00	.25	.30	.25	.30	...	.30	.25	.25	...	...	...	...	...	.25
0477	.75	.50	...	...	.80	.80	.25	.30	.20	.30	...	.30	.25	.25	...	...	...	...	...	.25
678	1.00	.60	...	...	2.50	1.00	.35	.50	.25	1.00	...	.30	.45	.25	...	.15	...	.60	...	...
2100	2.40	.60	.80	.30	1.20	1.00	.25	.40	.20	.35	...	.45	...	...	...	...	.10	...	...	...
29	2.25	.60	.70	.30	.90	1.00	.40	.45	.35	.35	...	.40	.30	.25	...	.15	.15	...	...	...

Please be sure to specify drill number and name of part.

Parts for Millers Falls and Goodell-Pratt Hand Drills

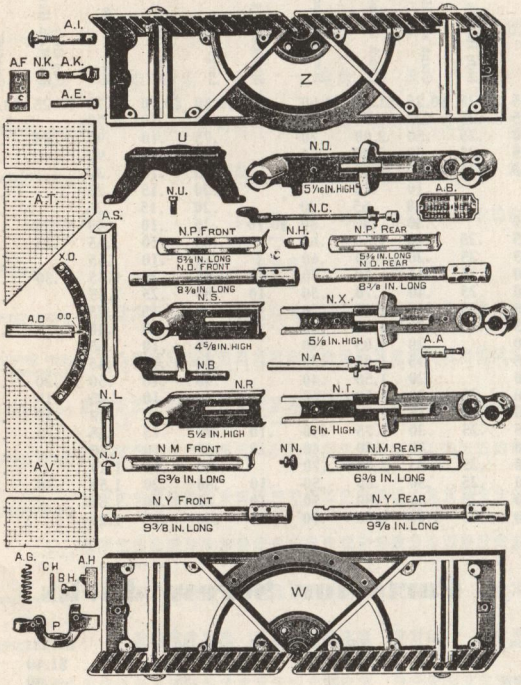
Number	Main Handle	Stationary Side Handle	Crank and Handle	Chuck Complete	Jaws and Springs Set	Springs Only	Large Gear	Small Gear	Main Frame	Cap Only For Main Handle	Spindle	Gear Clip	Clutch
1	$0.65	$0.25	$0.25	$1.50	$0.60		$0.50	$0.10	$0.70	$0.25	$0.20		
01	.25	.25	.25	1.50	.60		.50	.10	.70		.20		
2	1.00	.25	.50	2.00	.70		.75	.10	.90	.30	.25		
2B	.35	.25	.50	2.00	.70		.75	.10	.90		.25		
3	.55	.25	.20	1.50	.60		.40	.10	.30		.20		
4			.10	.10			.20	.15	.25		.10		
4D			.10	.65	.20		.20	.15	.25		.20		
4½	.80		.30	.50	.30	$0.10	.35	.10	.40	.25	.10	$0.10	
5	.65	.25	.20	1.50	.60		.60	.10	.65	.25	.20		
05	.25	.25	.20	1.50	.60		.60	.10	.65		.20		
5½	1.00	.25	.45	.70	.50	.10	.85	.25	1.35	.30	.25	.10	$0.20
5½B	.80	.25	.40	.70	.50	.10	.85	.25	1.35		.25	.10	.20
7	.25	.25	.15	2.00	.70		.70	.15	.75		.25		
77	.15	.25	.20	1.00	.30		.30	.10	.40		.20		
85	.20		.20	1.05	.40		.40	.10	.65		.20		
94	.15		.15	1.05	.30		.30	.10	.15		.20		
104	.40		.20	1.50	.40		.40	.10	.50	.20	.20		
303	.40	.25	.20	1.50	.60		.60	.10	.25	.15	.20		
315	.40	.25	1.15	1.50	.40		.65	.10	.30	.15	.20		
379	.85	.25	.30	.75	.40	.10	.70	.15	.85	.25	.10	.10	
655	.20		.30	.50	.40	.10	.35	.10	.40		.10		
980	.80	.25	.25	2.00	.70		.80	.15	1.20		.25		
1515	1.00	.25	.30	.80	.50	.10	.80	.20	1.50	.30	.20	.10	
1616	.80	.25	.30	.80	.50	.10	.80	.20	1.50		.20	.10	
1980	.80	.25	1.00	2.00	.70		.80	.15	1.20		.25		

Parts for Screw Jacks

Description	No. 115	No. 130	No. 135	No. 140
Base	$2.50	$2.75	$1.40	$2.75
Inner Lift Screw	.55	.55	.40	.55
Outer Lift Screw	.90	1.25	.60	1.25
Bevel Gear	.40	.40	.25	.40
Pinion Gear	.20	.20	.20	.20
Pinion Gear Shaft	.15	.15	.15	.15
Lift Screw Cap	.20	.20	.15	.20
Lift Screw Cap Screw	.10	.10	.10	.10
Handle Complete	1.40	1.80	1.10	1.80

For Hydraulic Jack Parts, see page 237.

Parts for Langdon Acme Mitre Boxes



Nos. 68-75 and 71A-75A

Parts for Langdon Acme Mitre Boxes

Nos. 68-75 and 71A-75A

		For Boxes Nos.		Each
AA	Binder	71-75	71A-75A	$0.15
AB	Index Plate	68-75	71A-75A	.25
AD	Gib	68-75	71A-75A	.50
AE	Gib Screw	68-75	71A-75A	.10
AF	Binding Strap	68-75	71A-75A	.20
AG	Spring	68-75	71A-75A	.10
AH	Stop Lever Strap	68-75	71A-75A	.10
AI	Stock Rest	68-75	71A-75A	.30
AK	King Bolt	68-75	71A-75A	.15
AS	Length Gauge	68-75		.30
A4	Length Gauge, complete		71A-75A	2.00
AT	Right Hand Bottom Board	68-75	71A-75A	.75
AV	Left Hand Bottom Board	68-75	71A-75A	.75
BH	Stop Lever Strap Screw	68-75	71A-75A	.10
CH	Stop Lever Pin	68-75	71A-75A	.10
NA	Stop Lever Rod	71-75	71A-75A	.35
NB	Thumb Lever	71-75	71A-75A	.50
NC	Thumb Stop Lever	68-70		.50
ND	Saw Guide (Front)	68-73	71A-75A	.95
ND	Saw Guide (Rear)	68-73	71A-75A	.95
NH	Elevator	68-75	71A-75A	.50
NJ	Guide Stop Screw	68-75	71A-75A	.10
NK	King Bolt Stop Screw	68-75	71A-75A	.10
NL	Guide Stop	68-75	71A-75A	.10
NM	Stop Gauge (Front and Rear)	74-75	71A-75A	.15
NN	Stop Gauge Thumb Screw	68-75	71A-75A	.20
NO	Swinging Lever	68-70		4.00
NP	Stop Gauge (Front and Rear)	68-73	71A-75A	.15
NR	Sliding Front Post	74-75	71A-75A	1.30
NS	Sliding Front Post	71-73		1.25
NT	Swinging Lever	74-75	74A-75A	3.00
NU	Leg Screw	68-75	71A-75A	.10
NX	Swinging Lever	71-73	71A-73A	3.00
NY	Saw Guide (Front)	74-75	74A-75A	.95
NY	Saw Guide (Rear)	74-75	74A-75A	.95
OO	Indicator	68-75	71A-75A	.10
P	Stop Lever	68-75	71A-75A	.25
S5	Swinging Lever Bearing		71A-75A	.50
U	Leg	68-75	71A-75A	.50
W	Bed and Back	71-75	71A-75A	6.60
XO	Graduated Arc	68-75	71A-75A	.55
Z	Bed and Back	68-73		6.60

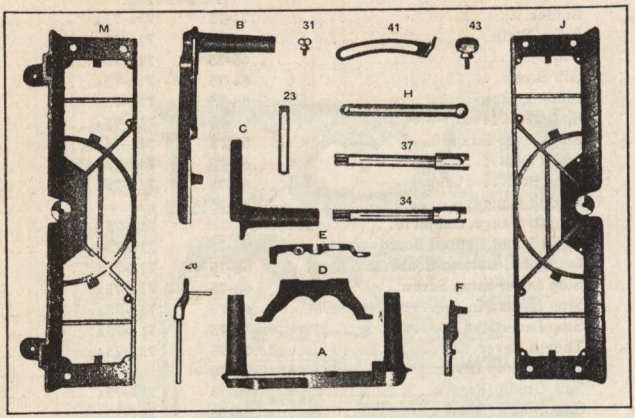
Parts NO, P, NR, NS, NT, U, W, NX and Z have corresponding letters cast in them, so, if in doubt, reference may be made to the castings.

Parts for New Langdon Improved

Nos. 29, 32, 33 and 34

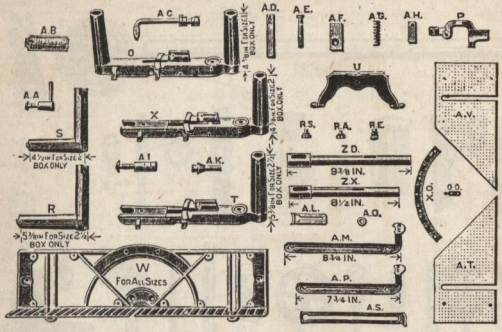
New Langdon Mitre Boxes

Nos. 17, 23 and 25



Part No.	Used on New Langdon	Used on New Langdon Imp.	Name of Part	Price
A	Size 1	Size 1	Swinging Lever	$2.10
B	Size 2	Size 2	Swinging Lever	1.50
C	Size 2	Size 2	Sliding Post	1.40
D	Size 1-2-2½	Size 1-2-2½	Legs	.25
E	Size 1	Size 1	Stop Lever	.45
F	Size 2-2½	Size 2-2½	Stop Lever	.45
H	Size 1-2-2½	Size 1-2-2½	Gib	.65
K	Size 2½	Size 2½	Sliding Post	1.45
J	Size 1-2	Size	Bed and Back	5.50
Y	Size 2½	Size	Bed and Back	6.00
M	Size	Size 1-2	Bed and Back	6.00
N	Size	Size 2½	Bed and Back	6.25
L	Size 2½	Size 2½	Swinging Lever	2.30
23	Size 1-2-2½	Size 1-2-2½	Stop Gauge (Front)	.10
26	Size 2-2½	Size 2-2½	Thumb Lever, complete	.25
31	Size 1-2-2½	Size 1-2-2½	Thumb Screw	.15
32	Size 1-2	Size 1-2	Stop Gauge (Rear)	.10
33	Size 2½	Size 2½	Stop Gauge (Rear)	.10
34	Size 1	Size 1	Front Guide	.85
35	Size 2	Size 2	Front Guide	.85
36	Size 2½	Size 2½	Front Guide	.85
37	Size 1-2	Size 1-2	Rear Guide	.85
38	Size 2½	Size 2½	Rear Guide	.85
39	Size 1-2	Size 1-2	Bottom Boards (Right or Left)	.60
40	Size 2½	Size 2½	Bottom Boards (Right or Left)	.60
41	Size	Size 1-2	Circular Arms (Right or Left)	.55
42	Size	Size 2½	Circular Arms (Right or Left)	.60
43	Size	Size 1-2-2½	Circular Arm Thumb Screws	.15

Parts for Old Style Langdon Acme Mitre Box

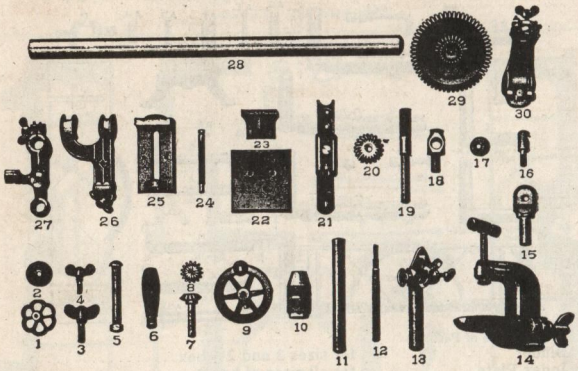


Part No.	Name of Part		Price
AA	Binder	for sizes 2 and 2½ box	$0.15
AB	Index Plate	for all sizes of boxes	.20
AC	Thumb Stop Lever	for all sizes of boxes	.50
AD	Gib	for all sizes of boxes	.50
AE	Gib Screw	for all sizes of boxes	.10
AF	Binding Strap	for all sizes of boxes	.20
AG	Spring	for all sizes of boxes	.10
AH	Stop Lever Strap	for all sizes of boxes	.10
AI	Stock Rest	for all sizes of boxes	.20
AK	King Bolt	for all sizes of boxes	.15
AL	Guide Stop	for all sizes of boxes	.10
AM	Elevator Bar	for size 2½ box	.30
AO	Washer	for all sizes of boxes	.10
AP	Elevator Bar	for sizes 1 and 2 box	.30
AS	Length Gauge	for all sizes of boxes	.30
AT	Right Hand Bottom Board	for all sizes of boxes	.70
AV	Left Hand Bottom Board	for all sizes of boxes	.70
O	Swinging Lever	for size 1 box	4.00
OO	Indicator	for all sizes of boxes	.10
P	Stop Lever	for all sizes of boxes	.25
R	Sliding Front Post	for size 2½ box	1.30
RA	Guide Stop Screw—Rear	for all sizes of boxes	.10
RE	Elevator Stop Screw	for all sizes of boxes	.10
RS	Guide Stop Screw—Front	for sizes 2 and 2½ box	.10
S	Sliding Front Post	for size 2 box	1.40
T	Swinging Lever	for size 2½ box	2.70
U	Leg	for all sizes of boxes	.65
W	Bed and Back	for size 2½ box	6.60
X	Swinging Lever	for size 2 box	2.70
XO	Graduated Arc	for all sizes of boxes	.60
ZD	Saw Guide	for size 2½ box	1.00
ZX	Saw Guide	for sizes 1 and 2 box	1.00
Z	Bed and Back	for sizes 1 and 2 box	7.00

Parts O, P, R, S, T, U, W and X, have corresponding letters cast in them, so, if in doubt, reference may be made to the castings.

Parts for Bench Drills

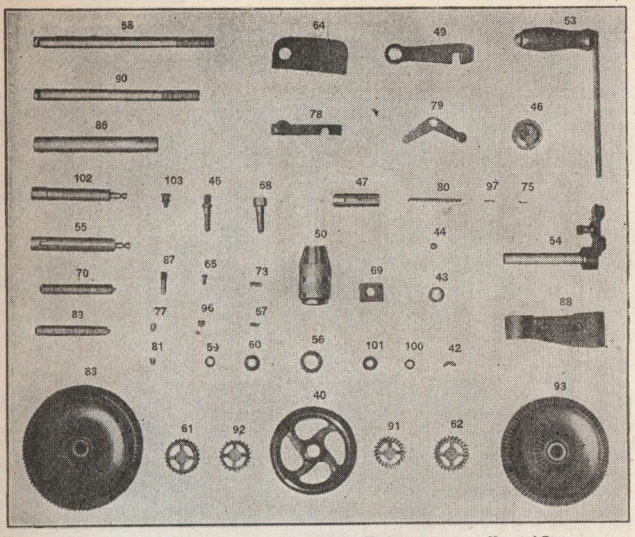
Nos. 20 and 21



Part No.	Description	Price
1	Vise Wheel	$0.15
2	Fiber Washer	.10
3	Bench Clamp Binder Screw	.10
4	Frame Thumb Screw and Vise Arm Thumb Screw	.20
5	Crank Handle Bolt and Nut	.20
6	Crank Handle	.35
7	Arbor and Gear	.20
8	Spindle Gear	.15
9	Feed Wheel, complete	.55
10	Chuck	2.60
11	No. 21 Attachment Frame	1.30
12	Feed Screw	.40
13	No. 20 Attachment, complete	1.00
14	Bench Clamp, complete	1.50
15	Swivel	1.25
16	Vise Swivel Screw	.10
17	No. 21 Attachment Gear Screw	.15
18	No. 21 Attachment Gear Stud	.45
19	No. 21 Attachment Spindle	.50
20	No. 21 Attachment Pinion	.50
21	No. 21 Attachment Crank, complete	1.05
22	Vise Table	.50
23	Vise Short Jaw	.30
24	Vise Feed Screw	.25
25	Vise Long Jaw	1.00
26	Lower Frame, complete	.90
27	Upper Frame, complete	.90
28	Standard	.90
29	No. 21 Attachment Large Gear	1.00
30	Vise Arm, complete	1.65

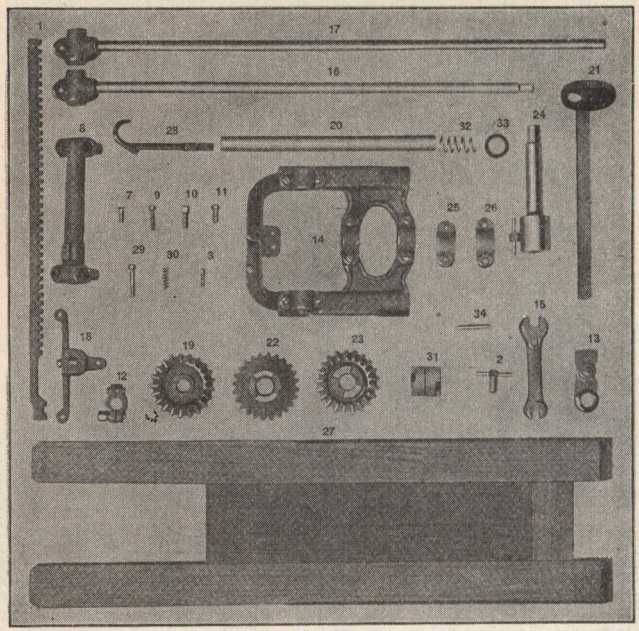
Please order by drill number as well as part number. It will avoid possible chance of error.

Parts for Bench Drills Nos. 210 and 216



Pt. No.	Used on	Name of Part	Price
40	216-210	Feed wheel	$0.60
41	216-210	Feed wheel pin (Br. long dog)	.10
42	216-210	Spline key	.10
43	216-210	Key collar	.15
44	216-210	Key collar screw	.10
45	216-210	Table bracket clamp screw	.10
46	216-210	Bench clamp screw washer	.10
47	216-210	Bench clamp screw handle	.20
48	216-210	Bench clamp screw handle pin	.10
49	216-210	Wrench	.10
50	216-210	Chuck No. 7, nickeled	2.60
51	216-210	Shifter dog pin (No. 99 Br. Dr.)	.10
52	216-210	Gear pin (No. 12 Pinion)	.10
53	216-210	Flat crank handle, complete	.40
54	216-210	Crank casting (with large gear shaft)	.75
55	216	Feed screw	.75
56	216	Feed gear	.10
57	216	Feed gear spline gib	.10
58	216	Spindle	.55
59	216	Small ball race	.10
60	216	Large ball race	.10
61	216	Slow pinion	.25
62	216	Fast pinion	.30
63	216	Frame	11.05
64	216	Frame cap	.10
65	216	Frame cap screw (No. 102 Spk. Pt.)	.10
66	216	Table	3.00
67	216	Table bracket	1.50
68	216	Table bracket bolt	.10
69	216	Table bracket bolt nut	.10
70	216	Bench clamp screw	.15
71	216	Shifter, complete	1.60
72	216	Shifter barrel (two speed)	$0.25
73	216	Shifter dog (two speed)	.30
74	216	Shifter cam	.20
75	216	Shifter dog spring (No. 87 Br. Dr.)	.10
76	216	Shifter sleeve (knurled)	.50
77	216-210	Spline pin	.10
78	216	Feed bar, complete	.35
79	216	Cam lever, complete	.25
80	216	Cam lever spring	.10
81	216	Cam lever spring plug	.10
82	216	Steel ball bearings, 3/32 in., per doz.	.15
83	216	Large gear	1.50
84	210	Frame	6.00
85	210	Table	1.25
86	210	Table post	.40
87	210	Table post set screw (Bor. M. Top Cap)	.10
88	210	Table arm	.85
89	210	Bench clamp screw	.15
90	210	Spindle	.50
91	210	Fast pinion	.25
92	210	Slow pinion	.25
93	210	Large gear	1.25
94	210	Shifter, complete	1.30
95	210	Shifter barrel	.15
96	210	Shifter dogs (No. 99 Br. Dr.)	.20
97	210	Shifter dog spring (No. 99 Br. Dr.)	.10
98	210	Shifter cam	.20
99	210	Shifter sleeve (knurled)	.30
100	210	Small bearing washer	.10
101	210	Large bearing washer	.10
102	210	Feed screw	.15
103	216	Cam lever screw	.10

Parts for No. 145 Boring Machine

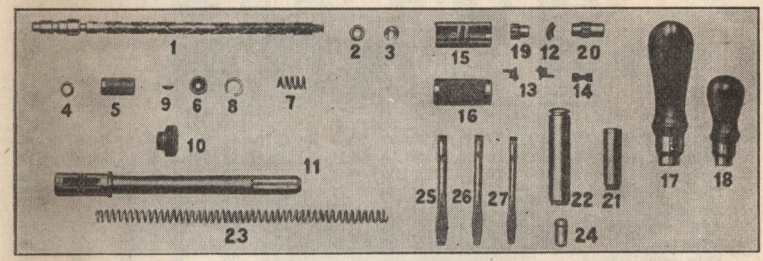


Ordering by number will avoid possible error and save unnecessary correspondence.

No.	Name of Part	Price
1	Rack	$0.90
2	Chuck Set Screw	.10
3	Short Rod Set Screw	.10
7	Arbor Cap Screw or Spider Screw	.10
8	Top Cap	1.40
9	Hook Screw (short) or Rack Screw	.10
10	Long Rod Set Screw	.10
11	Spindle Cap Screw	.10
12	Stop, complete	.35
13	Crank Casting, complete	.45
14	Frame	6.00
15	Wrench	.25
16	Short Rod, complete	1.15
17	Long Rod, complete	1.20
18	Spider, complete	.45
19	Spindle Gear	$0.50
20	Arbor	.40
21	Flat Handle, complete	.60
22	Rack Gear	.75
23	Arbor Gear	.75
24	Chuck Spindle, complete	1.00
25	Arbor Cap	.10
26	Spindle Cap	.10
27	Table	5.00
28	Hook	.20
29	Hook Screw (long)	.10
30	Hook Spring	.10
31	Clutch	.25
32	Gear Spring	.10
33	Gear Washer	.10
34	Taper Pin	.10

Parts for Spiral Ratchet Screw Drivers

Nos. 61-62-67 and Nos. 610-620-670

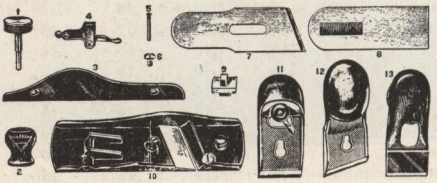


In ordering parts, please specify the number of the screw driver as well as the part number.

No.	Name of Part	No. 61	No. 610	No. 62	No. 620	No. 67	No. 670
1	Chuck and Spiral	$0.60	$0.60	$0.70	$0.70	$0.55	$0.55
2	Stop Collar	.10	.10	.10	.10	.10	.10
3	Stop Collar Washer	.10	.10	.10	.10	.10	.10
4	Chuck Collar	.10	.10	.10	.10	.10	.10
5	Chuck Shell	.15	.15	.15	.15	.15	.15
6	Chuck Cam	.10	.10	.10	.10	.10	.10
7	Chuck Spring	.10	.10	.10	.10	.10	.10
8	Stop Ring	.10	.10	.10	.10	.10	.10
9	Blade Key	.10	.10	.10	.10	.10	.10
10	Lock Cam, complete	.50	.50	.50	.50	.30	.30
11	Frame, complete	1.00	1.00	1.50	1.50	.80	.80
12	Ratchet Key	.10	.10	.10	.10	.10	.10
13	Pawls (2)	.20	.20	.20	.20	.20	.20
14	Pawl Springs	.10	.10	.10	.10	.10	.10
15	Cam	.10	.10	.20	.20	.15	.15
16	Shifter Sleeve	.20	.20	.30	.30	.15	.15
17	Handle and Ferrule	.35	.35	.40	.40		
18	Handle and Ferrule					.35	.35
19	R. H. Nut	.35	.35	.35	.35	.30	.30
20	L. H. Nut	.35	.35	.35	.35	.30	.30
21	Cell		.20				.15
22	Cell and Cap				.35		
23	Spring		.10		.10		.10
24	Spring Step		.10		.10		.10
25	Large Blade	.20	.20	.30	.30	.15	.15
26	Medium Blade	.20	.20	.30	.30	.15	.15
27	Small Blade	.20	.20	.30	.30	.15	.15

Parts for Block Planes

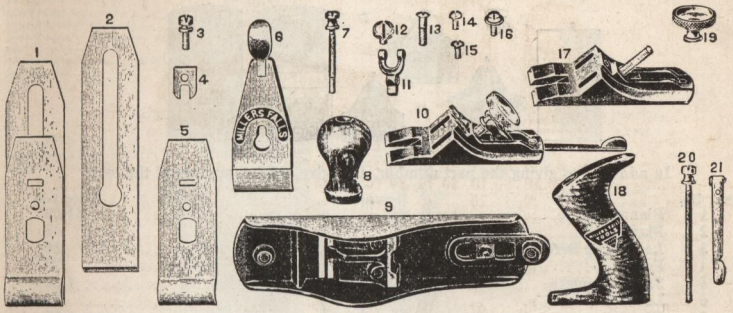
No.	Description for Plane	No. 16	No. 17	No. 26	No. 27	No. 36	No. 37	No. 46	No. 47	No. 56	No. 57	No. 66
1	Adjusting Nut	$0.10	$0.10	$0.10	$0.10	$0.10	$0.10	$0.10	$0.10	$0.10	$0.10	$0.10
2	Lever Cap	.20	.20	.30	.30			.30		.20	.20	.30
3	Finger Rest Knob	.20	.20	.20	.20	.20	.20	.20	.20	.20	.20	.20
4	Lever Cap					.75	.75		.75			
5	Adj. Lever Pin	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05	.05
6	Adjusting Nut	.20	.20	.20	.20	.20	.20	.20	.20	.20	.20	.20
7	Frog, complete							.20	.20	.20	.20	.20
8	Eccentric Plate	.20	.20	.20	.20	.20	.20	.20	.20	.20	.20	.20
9	Lateral Adj. Lever	.20	.20	.20	.20	.20	.20					
10	Bottom	1.40	1.50	1.50	1.50	1.50	1.50	1.20	1.50	1.20	1.50	1.00
11	Lever Cap Screw	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
12	Single Plane Irons	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45
13	Adjusting Lever	.10	.10	.10	.10	.10	.10					



No.	Description for Plane	No. 3	No. 5	No. 07	No. 33	No. 45	No. 55	No. 68	No. 75	No. 87	No. 97
1	Adjusting Nut			$0.20		$0.20			$0.20		
2	Plane Knob			.30		.30		$0.20	.30	$0.20	$0.20
3	Detachable Side			.50							
4	Frog, complete			.20		.20	$0.30		.20		.30
5	Frog Pin			.05		.05	.05		.05		.05
6	Side Screw (per pair)			.20							
7	Single Plane Iron			.50							
8	Single Plane Iron	$0.10	$0.20		$0.10	.45	.20	.30	.45	.30	.45
9	Frog, complete			.25		.25			.25		
10	Plane Bottom	.20	.40	1.50	.20	.50	.40	.70	.60	.50	.60
11	Lever Cap					.20			.20		
12	Lever Cap			.30							
13	Lever Cap	.10	.20		.10		.20	.20		.20	.20

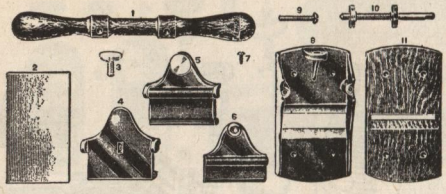
When ordering parts be sure to give the number and name of the part and the number of the plane it is to fit.

Parts for Bench Planes



Part No.	Description of Plane	No. 7	No. 8 and 8C	No. 9 and 9C	No. 10 and 10C	No. 11	No. 14 and 14C	No. 15 and 15C	No. 18 and 18C	No. 22 and 22C	No. 24 and 24C
1	Double Plane Iron	$0.90	$1.00	$1.10	$1.25	$1.00	$1.10	$1.20	$1.25	$1.25	$1.30
2	Single Plane Iron	.55	.60	.65	.80	.60	.65	.75	.80	.80	.80
3	Frog Adj. Screw	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
4	Frog Clip	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
5	Plane Iron Cap	.35	.40	.45	.45	.40	.45	.45	.45	.45	.50
6	Lever Cap, complete	.50	.50	.50	.50	.50	.50	.50	.50	.50	.50
7	Knob Bolt and Nut	.20	.20	.20	.20	.20	.20	.20	.20	.20	.20
8	Plane Knob	.30	.30	.30	.30	.30	.30	.30	.30	.30	.30
9	Plane Bottom	1.70	2.00	2.00	2.40	2.40	2.40	2.40	3.30	4.70	5.70
10	Frog, complete	.70	.70	.70	.70	.70	.70	.70	.70	.70	.70
11	"Y" Adj. Lever	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
12	Cap Screw	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
13	Lever Cap Screw	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
14	Frog Clip Screw	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
15	Plane H'dle Screw				.10	.10	.10	.10	.10	.10	.10
16	Frog Screw	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
17	Frog	.40	.40	.40	.40	.40	.40	.40	.40	.40	.40
18	Plane Handle	.40	.40	.40	.40	.40	.40	.40	.40	.40	.40
19	Adjusting Nut	.20	.20	.20	.20	.20	.20	.20	.20	.20	.20
20	H'dle, Bolt and Nut	.20	.20	.20	.20	.20	.20	.20	.20	.20	.20
21	Lateral Adj. Lever	.20	.20	.20	.20	.20	.20	.20	.20	.20	.20

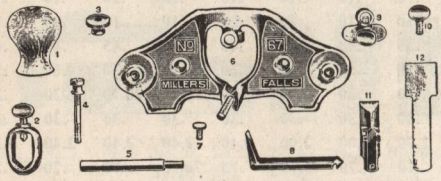
Parts for Scraper Planes



In addition to giving the part number, also give catalog number of the tool.

Part No.	Description	Price List
1	Plane Handle	$1.00
2	Plane Iron	.45
3	Lever Cap Screw	.10
4	Frog	.70
5	Frog, complete	1.20
6	Lever Cap	.40
7	Wood Bottom Screw (set of 4)	.10
8	Plane Bottom	2.40
9	Plane Hand Screw	.10
10	Adjusting Nut	.20
11	Wood Bottom	1.00

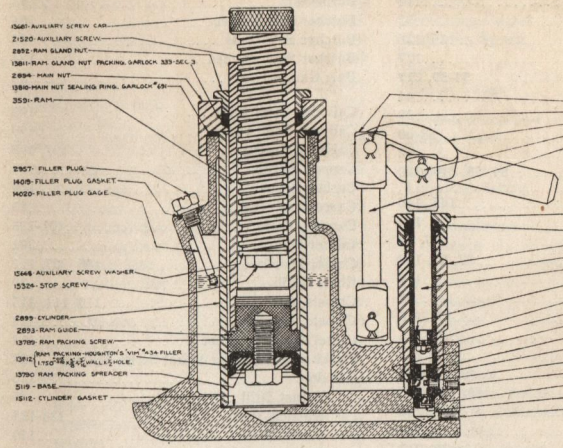
Parts for Routers and Rabbet Planes

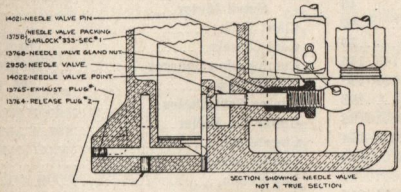


In addition to giving part number, also give catalog number of the tool.

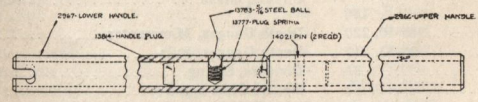
Part No.	Description	Price List
1	Plane Knob	$0.30
2	Collar	.50
3	Adjusting Nut	.10
4	Knob Bolt and Nut	.20
5	Extra Attachment Stud	.10
6	Plane Bottom	2.00
7	Clamp Screw	.10
8	Single Plane Iron	.60
9	Extra Attachment	.40
10	Thumb Screw	.10
11	Lever Cap	.20
12	Single Plane Iron	.40

Parts for Hydraulic Jacks





SECTION SHOWING NEEDLE VALVE. NOT A TRUE SECTION



Space in this catalog does not permit the listing of all the parts going into the Nos. 180 and 185 Hydraulic Jacks. However, the cross sectional cut above shows all parts in their exact location in the assembly and gives their proper name and number. With the name and number of any parts required we can quote very promptly on your needs.

GREENFIELD, MASSACHUSETTS

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